

THE MICHIGAN FARMER,

A WEEKLY JOURNAL OF AFFAIRS

Relating to the Farm, the Garden, and the Household.

NEW SERIES.

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The Michigan Farmer,

R. F. JOHNSTONE, EDITOR.

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The Farm.

On the Structure and Properties of Wool.

The effects produced by crossing the breed of sheep considered, and practically demonstrated.

BY HENRY GOADBY, M. D.

PROFESSOR OF VEGETABLE AND ANIMAL PHYSIOLOGY, AND ENTOMOLOGY, IN THE STATE AGRICULTURAL COLLEGE OF MICHIGAN

[Copyright secured Jan. 12, 1859.]

Continued from page 25.

The wool of a pure-blooded Spanish ewe is shown in fig. 11: it will be seen to compare very favorably with the Saxony wools. As the last of the fine wools, a specimen of a pure French buck is shown in fig. 12.

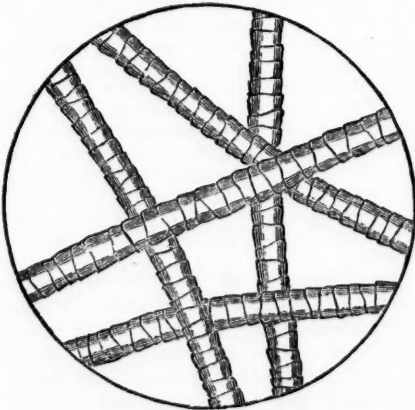


Fig. 11. The Wool of a pure Spanish Merino ewe.

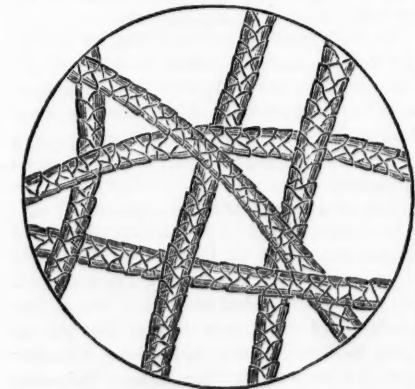


Fig. 12. The Wool of a pure French Merino buck.

It must be borne in mind, that all these samples of pure wools have been selected with

the greatest care; they form the cream of 80 preparations—the best out of upwards of 150 specimens—and, with the exception of the Saxony wools, they are much above the average; but the question under discussion must be deemed a most important one, and every attempt has been made to place the subject honestly before those who it may concern, so that, the evidence being fairly stated, each one may form his own conclusions and judge for himself.

In advocating the claims to consideration of the Saxony wools, reference is only intended to be made to the materials necessary for the manufacture of very fine and superior fabrics; but where warm clothing, and especially flannels are required, nothing can exceed the value of the pure Southdown, Cotswold, or Leicester; these are coarse wools, especially the latter, but each of them of great beauty, and for economic purposes unsurpassed; the pure Southdown is shown in

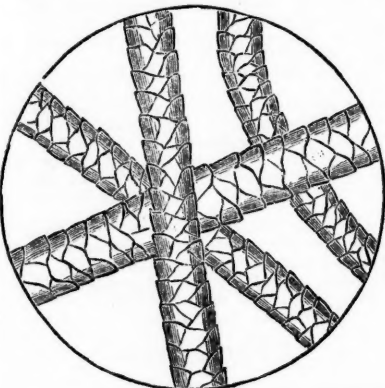


Fig. 13. The Wool of a pure Southdown sheep.

fig. 13, the largest wool measuring two squares of the micrometer, and the remainder a square and a half each. Fig. 14 represents a pure Cotswold, contributed by Mr. John Weaver, of this city and Canada, who obtained it at a yearly sale of Earl Bathurst's Cotswold stock; it was plucked from a year-

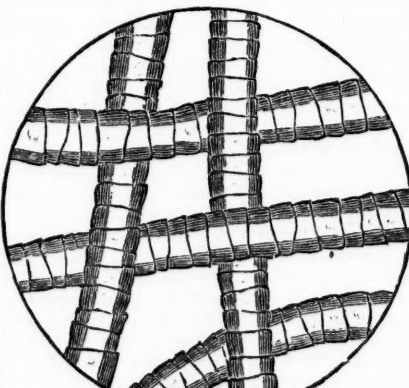


Fig. 14. The Wool of a pure Cotswold buck.

ling lamb, which had just been sold for upwards of fifty pounds sterling; it is evidently very pure, measuring the same size nearly as the Southdown, and, although coarse, a very beautiful wool. Fig. 15 represents a pure

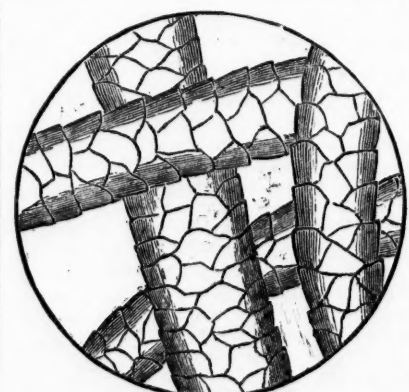


Fig. 15. The Wool of a pure Leicester sheep.

Leicester, which may fairly be called a most magnificent wool. This is the same wool that was treated with caustic soda described in fig. 4; by comparing these figures, the great enlargement of the tissue, caused by the chemical re-agent, will be apparent.

A great and laudable desire has long been manifested, in this country, to improve the quality and fineness of wool; from the diversity of opinion exhibited in relation to this subject, it would appear that, up to the present time, no one has very well succeeded.

For the accomplishment of this object "crossing" is mainly resorted to; one farmer believes that Silesian and French is the best cross; another says, no, not Silesian—Spanish and French, makes by far the best cross; while a third exclaims, gentlemen you are both wrong—nothing equals Silesian and Saxony. To this part of the subject more care and attention has been devoted than to all the rest; the facts however, revealed in connection with the examinations, are as surprising as unexpected. The microscope declares that the three gentlemen quoted are equally correct in their opinions, because they are all wrong, and have been wasting both time and money, not to improve, but to see how much they can damage an otherwise good wool.—Some gentlemen prefer half Silesian and half Saxony; another records three-fourths French, and one-fourth Spanish; another seven-eighths French and one-eighth Spanish, while another prefers three-fourth to seven-eighths French and the remainder Silesian. Doubtless these gentlemen will be much surprised to learn, that in all these careful apportionings of the blood of different varieties, with each other inter-changeably, the wools

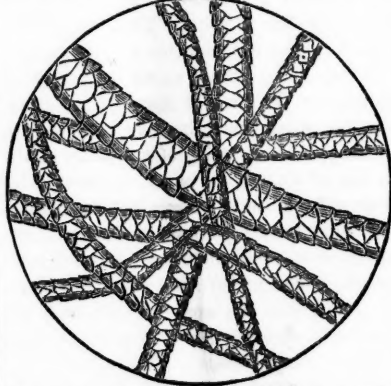


Fig. 16. The Wool of a sheep bred from Silesian and French parents.

are in every instance much deteriorated in quality, and radically bad. In England, mutation is of far greater consequence than wool, and the only intention of crossing there, is to improve the breed of sheep; the French, preserve their merinos pure; the Spaniards, and the Germans do the same. The great, and surprising superiority of the Saxony cloth arises from the fact that it is made of a fine,

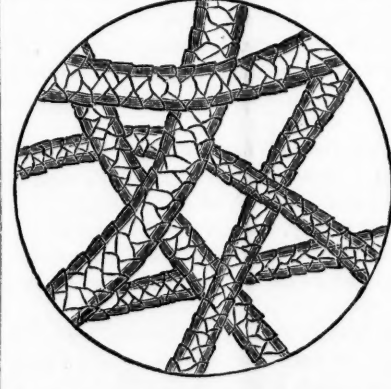


Fig. 17. The Wool of a sheep bred from Spanish and French parents.

pure wools of any variety—they are never to be found; the hairs are a little larger or a little smaller than the average, each being straight, and of uniform diameter throughout until it nearly reaches the extremity, when, if it have never been clipped, it gradually diminishes in size, and terminates in a fine point fig. 21: if the points of human hair, or of wool be once cut off, they cannot be renewed. It appears to be a never failing contingency associated with the wool of cross-breeds, that they are invariably distorted; the wool of each parent is occasionally represented beside an enormously enlarged and considerably distorted hair. Mr. Gillett, of this State, contributed a very valuable parcel of wools for examination, so judiciously arranged and carefully selected, that they proved of great importance in prosecution of these researches. He was thoughtful enough, to send the wools of a Silesian buck and Saxony ewe—the

15 four times that size. All the cross breeds exhibit great variety of size;—some hairs being fine and well formed, similar to the wool of one of the parents; others presenting remarkable irregularity, some portions of its length being moderately fine, then suddenly

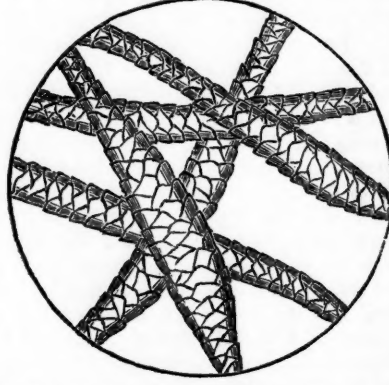


Fig. 18. The Wool of a sheep bred from Silesian and Spanish parents.

bulging out to greatly increased dimensions. This, as shown by the figures, is the constant and universal character of cross-breeds, only differing in degree as regards the irregularity of blood on one side: in other words, the nearer the blood approximates purity, the less this characteristic is perceptible.

A specimen of Silesian and French is represented at fig. 16; in this wool the distortion is very considerable. Spanish and French appears to fare no better, if we may judge from the appearance of it as represented in

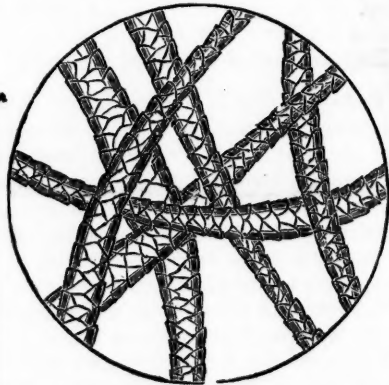


Fig. 19. The Wool of a sheep bred from Silesian and Spanish parents.

fig. 17, so too Silesian and Spanish make a bad figure, as shown in fig. 18, while Silesian and Saxony is fully as badly represented in fig. 19. Southdown when crossed with Leicester seems to suffer very considerably, if we may judge from the miserable appearance it presents in fig. 20.

These distortions are sought for in vain in

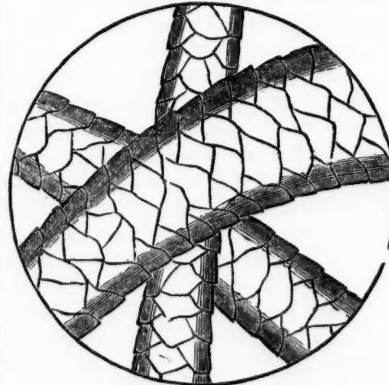


Fig. 20. The Wool of a sheep bred from Southdown and Leicester parents.

pure wools of any variety—they are never to be found; the hairs are a little larger or a little smaller than the average, each being straight, and of uniform diameter throughout until it nearly reaches the extremity, when, if it have never been clipped, it gradually diminishes in size, and terminates in a fine point fig. 21: if the points of human hair, or of wool be once cut off, they cannot be renewed.

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sire and dam of a lamb whose wool he also forwarded; the examination of these specimens was as gratifying as the results (to the author's mind) were conclusive, and the theory involved in these investigations might fairly be permitted to rest on these three wools alone, for they satisfactorily expound the whole history, which the remainder of the preparations have only confirmed.

(To be continued.)

Nothing to Sell—How the Crop is Grown in Michigan.

MR. EDITOR:—Your last number, if only read by the farmers of this State, ought to set them a-thinking. I am one of those who have been raising that crop which your Pontiac correspondent speaks so depreciatingly about, and I have got now more of it on my farm than I know what to do with.—About this time last year I set to work to raise this crop, and the first thing I did, was to do nothing, except to sell off nearly every bit of stuff I had, and use up all the proceeds in part to pay interest on money that had been borrowed to help to buy a forty acre lot, that I took a fancy to own two years ago, because it lay across the end of one of my fields, and the rest went to pay the interest on a mortgage on the farm I live on, and to repay money that was borrowed to pay the taxes; perhaps you will think that I raised a good deal of that crop of "nothing to sell" last year as well as this. Well when the stuff was all sold off, you see it was pretty hard work to get along, for I did not have much corn to give to the work team, when their work was wanted the most. I would have liked to have got the ground ready for spring crops, but the teams could not pull me thro', so I had to work them light, and as I had let the fall go past without doing any plowing, it had all to be done in the spring; I did not get much ground sown with either oats or barley, until it was late, and these crops did not do well with me. In fact they did not give back the seed. I did not have time nor help enough to get the manure out, and it lies in the yard yet. But I don't think it was much of a loss, for the straw on which the cattle mostly fed, when they were let out, was in a field some distance from the barn, and some of the neighbors said they guessed there was more dung left on the road between the yard and the stack, than there was in the yard.—Well, when I found I could not get much of an early crop in, I got in my oats as soon as I could, but the wet time made it so late, that they had no chance to grow, and where I had some sown pretty early, the water drowned it out partially, for there was no time to make furrows to let the water off. The corn crop did not do well, although it was planted on a good old sod that was turned up fresh on purpose to give it a chance. The ploughing of this field was done in a hurry, as I wanted to get some ten acres in before the middle of June; and of course the ploughing was not very deep. The season was bad for corn; mine did not do well; it did not seem to grow much, and after it got well started, the ears did not fill out, as I hoped they would. My whole crop of the ten acres did not yield much over 250 bushels of ears, but it was the best crop I had.

My sheep did not turn out very well, owing as I think to the season. They had all they could eat of good marsh hay, and they run in a piece of woods most of the time, but in the spring, a good many of them lost their fleeces, and out of 75 ewes there was only raised ten lambs. I lost five ewes by sickness, and the dogs got at the flock two or three times, and caused the loss of eight more, so that I have not now got as many as I had last winter, and you will see I have had none to sell. I don't keep much stock, except the sheep and work horses because it takes too much help to take care of them; but last spring, it was so long before it came warm, that most of the cattle kind came on to grass very poor, and they kept so thin all summer that they did not grow enough to pay for their keep, so that I had nothing to sell from them, except three calves that I got \$3.00 a piece for from the butcher, when they were eight weeks old. The sow had bad luck with her pigs, last spring, there was only two left out of eight, the rest were killed either by the mother, or were badly hurt by some other cause, as they seemed to dwindle and droop every day. The two shoats are good for next year, as they have had the run of the woods all summer and fall, and looked first rate when I shut them into the yard, but they are not fit for sale now, and those I raised last year are salted down, so you will see how I came to have no pork to sell. There is need of mentioning that the wheat crop of which I had twenty acres sowed did not do well; the rust began the trouble and the fly ended it; some of the field I did not cut, it was so badly damaged. I did not have much to sell of it.

REUBEN RAISENAUGHT.

Macomb County, January 1859.

FARMING IN GENESEE COUNTY.

AGRICULTURAL PAPERS.—HOGS.—CATTLE.—PUMPKINS.—BARLEY WITH FLAX.

FRIEND JOHNSTONE.—*Dear Sir:* I have received the first number of your valuable paper and feel quite anxious that my neighbors would take it, and have been trying to get up a Club in my neighborhood, but have not succeeded very well. Some would like the paper if they were able; others have no taste for reading agricultural papers, and some do not take any paper. I think that class of men must know little of the world, and less of themselves. I look upon that class as self-conceited and willfully blind as regards their own advancement, and the best interest of their family; and it is surprising to hear the foolish excuses that some will make. I cannot help thinking that many are blinded by the one thing needful, which they have a plenty of, and do not wish to part with any portion for more knowledge, that will make them wiser, and what I call of more value than gold that glistens. I think a man who is rearing a family is in duty bound to take some useful paper that they can have a chance to know what is going on in the world, and also acquire a taste for reading that every one ought to have in order to have the mind improving, and form such habits and tastes that will generally last them through life; "for just as the twig is bent the tree inclines."

I shall use my influence to increase the circulation of the FARMER, as I consider the paper mine and not yours; it belongs to the farmers—the child is ours, and we must nourish it till it gets to be a man, and let the older States know that those who were once weak and feeble in infancy, have become giants in the earth, and are ready to go forth to slay the enemy and drive back the powers of darkness, and let that light shine that will tell in the future.

The farmers of this part are in good circumstances, and there is not one but what is able to take as many papers as they could find time to read. But in this farming community, there is a small part as a general thing, that you can get to take an agricultural paper, which is the very thing that a farmer wants to get the experience of others.

Now I would like to give my experience in keeping hogs. I find that farmers in this section of country, keep too many hogs; they do not make as much pork as they could from less. A very good way in my opinion is for a small farmer to keep two, and keep them in a pen or a small lot, and when they are fat and dressed, get a couple more. I prefer keeping a brood sow and have pigs about the first of April, and make my pork of pigs; I have tried it till I am satisfied that it can be done without as much expense as to keep hogs till they are much older. I tried four last season, 1857, and four this season, 1858, and am well satisfied that I never made pork cheaper, although I did not weigh or measure the feed given them. But my plan is to give the sow a good chance to pasture and plenty of good food to increase the flow of milk, as the pigs advance in size, and so continue the feed, and as soon as the pigs are old enough to eat, fix a trough so that the pigs can be fed, and give them all they need to make them thrive fast, and let them run with the sow till time to commence fattening. At six months old they can be fed on whole corn for a month, and then ground feed is better, which wants to be scalded and made thin when fed, and in cold weather milk warm; feed no more than they will eat up clean and not quite as much as they would eat for the first month; give a single handful of charcoal to each pig once a week, and a tea-spoonful of salt.

Now, brother farmers, try my plan and if you do not have good pork, and as cheap as you ever made, please send me word and I will try and come over and see what the matter is with them. My pigs at eight months and twenty days old, weighed from 285 to 320 pounds dressed weight. All kinds of hogs will not take on fat so young as the Suffolk, but almost any good breed, crossed with the Suffolk, will make them much better to fatten while pigs. I think it would well pay every farmer that has not a breed that will mature young, to take a little pains to secure such.

I would advise every farmer not to keep any more stock than they can keep well. A little corn or oat meal given to cattle through the winter months, pays better in a long run than to sell all for a high price. Young stock will keep through the winter months, come to maturity one or two years sooner. My two year olds are fit for the market, and some of my neighbors are not heavier than my yearlings, bred from the same bull. So I am convinced that a little extra keep makes the difference. I like meal better than roots in cold weather, and roots in the spring, and I would recommend the plan of raising a few hundred bushels to feed in the spring, and pumpkins to feed in the fall.

What is the cost of raising pumpkins compared to other crops? I have raised all that

I could feed for the last two years among my corn, and I do not think the corn was any lighter for the crop of pumpkins, and they will keep till quite cold weather by covering them up with straw; and I think a crop can generally be depended on, if plenty of seed is used, and the soil is rich. I think two quarts of good seed is enough per acre to insure a crop in ordinary seasons. Since I adopted the plan of using plenty of seed, I always get a good crop on corn land.

The way to raise good barley, is to turn over clover sod in the spring about eight inches deep, and plant to corn, turn the same ground back as early the next spring as will do, and sow as early as the twentieth of April and not as late as May. If the plow leaves the ground rough, I would pass over once in a place with a drag. Sow and cultivate once, and then drag and roll. On rich land well blind ditched, thirty and forty bushels can be raised from an acre, and good wheat has been raised by sowing the same ground in the fall then seed to clover; this makes a good rotation of crops. I like sowing about five quarts of flax seed to the acre after I have sowed and cultivated my barley. One object of the flax is to help hold the straw together in harvesting and drawing, as all experienced men know that it is quite a difficult job to draw barley that is not bound into bundles, and another object is, it makes the straw to feed stock much better, and I think the barley crop will be as good as though the flax was not sown with it, and what seed matures will pass into the screen box and be saved in cleaning. I would further recommend to those that have not commenced blind ditching, to delay no longer, as the past season has convinced me more fully of the great advantage of ditches. I would refer those that have not seen my mode, to the July number of the FARMER. Not seeing any communication in the FARMER from this county since the July number, I have about come to the conclusion that I have spoke the mind of all, and there is nothing more to say, or else they have adopted the old adage, "that a wise head has a closed mouth." If they intend to keep what they know to themselves, I wish those that are far superior in qualifications, would not leave such a noble work for a cripple to do. I must close for want of time.

C. C. P.

Improvement of the Breed of Swine.

Perhaps no class of domestic animals need improving more than the Swine of our country. In proof of this, witness the herds of long-snouted, slab-sided, long-legged, hump-backed, thick-skinned brutes, which throng our streets and highways. Such animals are as insatiable as the leech spoken of in the Scriptures; and they constantly cry, "give, give." One ear of corn a day would hardly suffice their voracious appetites. They must get their growth, before they will fatten; which usually requires a year or more. To bring them up to the fattening point, as much food is consumed as would be necessary to fatten the right kind of a hog. Besides, a large amount of their food is absolutely wasted in growing their long snouts and ears, their long coarse hair and Shanghai legs. Many think, if a hog is heavy, it is the hog; not thinking, that a large amount of this weight may be made up of waste material. I saw a load of pork, of this description, in market the other day. It was readily purchased by a gentleman from St. Clair county, at \$6.40, the highest market price. He prided himself on having bought "a lot of heavy hogs." They did really look as though they might weigh from 400 to 500 hundred pounds each; but when tested by the scales, they only weighed from 350 to 400 pounds. Their heads were the largest part of their carcasses; whence, they gradually tapered to their extremities. Their ears were decidedly mulish; long, pendulous, with a slight inclination backwards. Their legs! well, they were legs, as is legs! Some one remarked; "they would do to fill the pork barrel;" but I thought they would illy suffice to fill the half-finished maws of the back-woodsmen of the North.

What we want, is a breed of hogs that will fatten at any age, and that will make the greatest amount of pork from the least amount of food. A pig, that is of good disposition, that will fatten at any age, that will make \$6.00 worth of pork from \$4.00 worth of food, that will make from 250 to 300 lbs. of pork at from 8 to 10 months old, comes up to my idea of a pig. A series of experiments, tending to show what breeds of swine, what kinds of food, how prepared and how fed, are necessary to produce the above desirable results, would be of incalculable benefit to the farmers of the country. It is to be regretted, that our Agricultural Societies do not see the importance of this subject, and offer an award that will bring out these facts. Our Society offers a premium of \$5.00 for the best fat hog. No statement is required

of the breed, the age, the weight, quantity and quality of food, mode of preparing and feeding the same, amount of food necessary to make a pound of pork, &c., all of which, is of the utmost consequence and importance; but which could hardly be elicited by the paltry sum of \$5.00. For all practical benefits, this premium, as it now stands, had better be stricken out entirely.

J. S. TIBBITS.

Livonia, 24th Jan. 1859.

Agriculture in Iowa.

EDITOR OF MICHIGAN FARMER:—Iowa was never more agitated on the subject of Agriculture—improved agriculture—than her citizens have been the past year and are now; and I am happy to add that this interest is increasing. The passage of a law last winter, appropriating \$10,000 for the purchase of a farm on which to open a Farmer's College, was an advance step which gratified her people as well as surprised and elicited the admiration of her sister States. Michigan was the first of the United States to establish such an institution; Iowa, prompted by so noble an example, has been the first to follow it. The act referred to, appointed a Board of Trustees, one from each of the eleven judicial districts, and made the Governor and President of the State Agricultural Society ex-officio members—thirteen in all.—But the first meeting could not be held until the second Monday of January. On that day nine of the Trustees assembled in the Senate Chamber of the capitol and organized. Proposals having been invited for the sale or donation of lands, money, &c., for the college and farm, the Board had before them propositions from Polk, Marshall, Story, Kossuth, Johnson, and Delaware counties, which ranged in amount from ten to thirty thousand dollars in value. They were placed in the hands of a committee to examine, together with such others as may be presented previous to the first of May next, who are to report, after examining the sites offered, to an adjourned meeting of the Board on the 6th day of June next, at which time the location will be made. From present indications, wherever the place selected may be, the institution will probably have donated sufficient land (640 acres) and money and material to improve the same. These, with the money appropriated, and about 3,000 acres of land in Jasper county, will give us a fund of about \$30,000 or \$40,000, which may be directly applied to the educational department.

The election of President and Professors was postponed to the next meeting of the Board, and a committee was appointed to correspond with parties all over the Union, in regard to the selection of persons suitable to fill these responsible positions, who are to report the result of their inquiries at that time. I will mention the committee, so that those wishing to correspond may know whom to address; they are: Hon. G. W. F. Sherwin, of Sioux City, Woodbury county; Snel Foster, Esq., of Muscatine, Muscatine county, and Wm. Duane Wilson, of Des Moines, Polk county.

Wm. Duane Wilson, the present Secretary was reelected to fill that post for a term of two years, and Richard Gaines, Esq., of Jefferson county, was elected Treasurer for the term of one year. After a session of two days and a half the Board adjourned to meet in June.

A large number of the leading farmers of the State were in attendance upon and manifested much interest in the deliberations of the Board, many of whom were delegates to the State Agricultural Society Board, which commenced its annual meeting here.

Iowa has now sixty-two organized County Agricultural Societies, and two District Societies; of these there were twenty represented in the Board, in addition to the officers and ten directors. Z. T. Fisher, Esq., Mahaska county, was elected President of the Society; W. W. Hamilton, of Dubuque county, Vice President; J. H. Wallace, of Muscatine, Secretary, and Robert Seavers, of Mahaska, Treasurer—all for one year. Considerable competition existed for the location of the fair this year; Davenport and Iowa City against Oskaloosa, where it was held last year. The latter succeeded. Many interesting essays on agricultural topics were read and discussed in the evenings during the session.

Yours, &c.,

Des Moines, Jan. 15th, 1859.

Men waste hundreds of acres of land on the theory that it is inexhaustible, whose entire wealth might not purchase the raw material—the magnesia, lime, soda, potash, phosphorus, sulphur, carbon, nitrogen, &c., necessary to make a single acre possessing primitive fertility. Thus the accumulated store of ages passes away in a single generation.

REAPERS AND MOWERS.

The State Board of Agriculture of Indiana have published in the Indiana Farmer, the report of the committee which made the test of Reapers and Mowers at Laporte, on the 7th of July, 1858. The results of this examination and trial are, that the first premium on Reapers was awarded to Mr. J. J. Mann's machine, with Watt's improvement, and the second was made to J. J. Mann's reaper.

There were eight entries of Mowers, the first premium being awarded to Altman & Miller's, and the second to H. F. Mann's improved Great-Western.

There were nine entries of combined machines; the first premium in this class was awarded to Kirby's combined Harvester, and one of its special commendations was that it was beyond all question the lightest draft machine on exhibition. The dynamometer in the track showed a draft only equal to 170 pounds, with a variation of 100. None of the others were below 250, with a variation of 200 pounds, while moving. Accompanying the reports were a series of tables giving answers to the following rules adopted by the committee:

First Rule—Quality of work—grain wasted—standing—beaten down. Gavel—manner left—compact or scattered—labor to take up and bind—where delivered. Work—ability to—about stumps, &c.—rough or uneven ground—in tangled grain—liability to clog.

Second Rule—Number of horses to work machine—work performed in a given time.

Third Rule—Materials for machine.

Fourth Rule—Workmanship—defects—nature—locality—consequence of defects.

Fifth Rule—What points of machine heated—rubbed.

Sixth Rule—Oiling machine—access to bolts—to screws—to nuts.

Seventh Rule—Moving machine from place to place—arrangements for.

Eighth Rule—Bearing of machines on neck of horses.

Ninth Rule—Cut of Machine—width—evenness.

Tenth Rule—Power required—total to do work—side draft—surface draft.

Eleventh Rule—Throwing machine in and out of gear, facility for—to grind knife—to raise or lower same—to change from reaper to mower, and vice versa.

Twelfth Rule—Cost of machine—combined.

Thirteenth Rule—Grain per acre estimated.

Fourteenth Rule—Weight of machine.

Fifteenth Rule—Which would you purchase for use were you in want of a machine?

A Test Challenge.

Mark R. Cockrill, of Nashville, Tennessee, long known as an agriculturist of much eminence, has just issued the following challenge, for the purpose of testing certain disputed points relative to the speed of the horse and the mule:

EDITOR OF PORTER'S SPIRIT.—*Dear Sir:*—I have said that the culture of Fine Wool could be successfully carried to low latitudes, even to the cotton climate, of 32° N., and think that a soft climate will produce a more soft and perfect wool than the far-famed German province, Silesia. This is doubted by many. I, therefore, propose to select five sheep from my flock, three ewes and two bucks, and show for \$2,000 a side, against any five sheep selected from one flock, ewes and bucks as above. All the world are requested to compete, making as many entries as they may think proper. The sheep are to be healthy, so as to make a fair comparison; each party entering having a right to select a fair and equitable share of the judges, who are to number not less than five. The premium to be awarded to the party who has three sheep out of the five that have the most soft and fine fibre of wool. Entries to be made with the Secretary of the Tennessee State Agricultural Bureau, on or before the 20th day of April next, but the exhibition to take place on the Nashville Track, on the second Monday in May, 1860, giving time for importation, &c.

2. It appears that the "fast boys" are about to trot down all of the blood stock of horses in creation, and deteriorate their blood. Believing, as I do, that the great blood horse is the proper horse for cavalry or express, or other long continued work, I hold him to be the best breeder, and the most active and strong of all the horse race. I therefore, propose for the public good, to compete for \$2,000 a side, starting two blood horses, (as accident might happen,) against all the trotting stock in the world. But the parties contending are not to start more than two, and to clearly establish that they do not enter the blood horse, or even an animal half of that blood. Each party carrying one hundred and twenty-five pounds, in any mode they think fit. The animal traveling the greatest distance in two hours around the Nashville Track, is to take the whole prize. Camels and dromedaries are requested to compete, as they are said to be express animals.

3. I believe that the mule is a better animal for the labor of an army and the general drudgery of the country, than the camel or dromedary. But little can be effected by men or animals, without water. I am therefore opposed to the great expenditure of the Government for the importation of those animals.

To test the value, I will compete with two mules against two camels or dromedaries, each to carry six hundred pounds, (the weight it is said the camels transport,) as they think proper, upon wheels or not, for \$2,000 a side.—The party to take the whole prize, that transports the above weight the greatest distance around the Nashville Track in two successive hours. I propose starting two animals for fear of accident. All entries to be made as above, on or before the 20th of April next,

but the test to be made during the second week of May, 1860, continuing from day to day.

These tests are proposed to be all made upon fair principles, for public good, upon the Nashville Course, a good sandy soil for such a test. All the world are respectfully invited to come forward and make the trials.

HOME NOTES.

Chemical Classification of Plants.

The numerous analyses made, enable us to make a classification of plants on the basis of their chemical composition. The ash of the grains abounds in phosphoric acid, it is the leading constituent, amounting to nearly one-half. The office of this compound is very evident, the bones of animals being composed mostly of phosphoric acid and lime. The grain also possesses a large amount of potash, but not equal to the phosphoric acid. The straw which supports the grain contains an abundance of silica. It is this which gives the straw its stiffness, its elastic strength.—On soils deficient in silica the straw will lodge.

The grasses abound in lime. They contain, it is true, considerable potash and silica, but the lime being present in greater proportion than in other plants, it may be regarded as their chief characteristic.

The ash of the root crops, such as the potato and turnip, is rich in potash.

We may adopt then, the following classification:

1st. The phosphoric acid plants, the grains.

2d. The potash plants—the root crops.

3d. The lime plants—the grasses.

And 4th, we may refer the different kinds of straw to a class by itself, as they are all characterized by an abundance of silica.

The lesson taught by this classification, no one can fail to discover. The phosphoric acid plants rapidly exhaust the soil of phosphoric acid, the potash plants of potash, and the lime plants of lime, while the straw draws heavily on the silica. Practical agriculture which disregards these facts in vegetable growth, cannot secure the greatest productiveness of the soil, and how can correct principles be applied unless first understood, and to chemistry alone are we indebted for disclosing the exhaustive tendency of the several crops, and hence dictating the proper manures to apply.—*Prof. Fisk, in Ingham County Address.*

Sorghum Syrup.

The *Prairie Farmer* has been presented by a Mr. Peck, with one of the best samples of syrup from the Sorghum that has been shown in Illinois, and the mode of manufacture is given as follows by the manufacturer:

"The juice was pressed from the stalks with two upright wooden rollers, a sweep fastened to the upper end, similar to a Yankee cider mill, worked by one horse. We could not express all the juice with wooden rollers. Strain the juice as soon as it is pressed out, cleanse with lime-water; use a piece of good unslacked lime the size of a hen's egg, put it into a pint of water when slacked, and stir and mix it well. Add this to twenty quarts of the cane juice or sap, and to this add the white of four eggs well beaten, stir well and put it in an iron kettle and over the fire for boiling; skim the scum off as it rises, being careful not to let it (the scum) boil in. We boiled the same as we would maple sap, to the thickness wanted for syrup. This was the manner in which the sample was made, shown at your office. We boiled some down thick enough to make sugar, but it did not grain until it had stood three or four days. When grained, it was as good as any I saw in your office—could not tell any difference either in taste or appearance. Our last syrup was made from the cane immediately after the first frost. Am inclined to think from my experience, that the syrup should be manufactured from the cane as soon as it is ripe or frosted. If the cane stands a week or two after the frost, the syrup is dark colored and not so pleasant to the taste. It is more acid, and resembles pumpkin molasses in flavor.

A Heavy Hog.

John Dunning, of Unadilla, Livingston county, Michigan, has slaughtered a hog which is claimed as the heaviest ever raised in this state. His weight previous to being slaughtered was 965 pounds and after being dressed 772 pounds. We are not informed of his age. We guess New Hampshire will have to "give it up," and come down.

The Skeleton of Black Hawk.

Dr. George Dadd, the celebrated veterinary professor, has articulated the bones of the celebrated Black Hawk, and the skeleton is to be placed in the rooms of the State House at Boston, which are provided for the reception of specimens of the natural history of Massachusetts.

Death of a celebrated Race Horse.

Melborne, a most distinguished stallion, and English race horse has been killed by order of his owner. He was twenty five years old. His most distinguished sons were West Australian, and Sir Tatton Sykes; the sire of "Old Melbourne" was Humphrey Clincker and his dam was by Cervantes. Melborne started eighteen times, and won nine times, his most distinguished feat being the winning of the Palatine Stakes.

PROGRESS.

The Garden & Orchard.

CENTRAL PARK, NEW YORK.

This great public work is located entirely above the compact portion of the city, extending from Fifty-ninth to One Hundred and Sixth street, a distance of about two and a half miles north and south, and lying between Fifth and Eighth avenues, about one half mile in width from east to west, with a total area of somewhat more than eight hundred acres. In this area are included the old Croton reservoir, covering thirty-three acres, and also one hundred and seven acres reserved for the site of a new reservoir, which is being constructed simultaneously with the surrounding improvements.

This park was located on lands previously laid out in city lots: the location being made under a special act of the State Legislature, by commissioners appointed for that purpose, whose duty it was to assess the value of the property taken, and also to levy a tax upon adjoining lot-holders, commensurate with the increased value of their lots arising from the adjoining improvements. Seven thousand five hundred and twenty city lots were taken, at an assessed value of over five millions of dollars, and the amount assessed for increased value upon adjacent property was one million six hundred thousand dollars. It is estimated that the total cost of the park, when complete, will not be less than ten millions of dollars.

This gigantic work is located upon one of the most sterile, rocky, and forbidding tracts that can be imagined. The whole tract seems to be underlaid with solid rock, which is thickly interspersed over the surface in the form of boulders, of all sizes, while ledges crop out in all directions, in many cases rising into immense knobs, often half an acre in extent, and thirty or forty feet in height. Some of these are to be covered with soil and planted, while others are to be removed by the slow process of blasting. Many portions are marshy, and require thorough underdrainage. About four hundred acres are to be traversed by underdrains, from four to five feet deep, and at distances of forty feet apart. The tile for this purpose are obtained at the Albany Tile Works. The outfall of this system of draining is made to supply a skating pond of twenty acres, on which Young America is to have the privilege of disporting himself, when the elements shall permit, provision being made to supply the deficiency of the drainage, if necessary, directly from the reservoir.

Near the northern extremity is to be a parade ground for the convenience of the military; while in various localities are provided play grounds, promenades, flower-gardens, and an arboretum: for which purpose large quantities of trees are in process of propagation.

Thoroughfares traverse the grounds at irregular distances, passing from street to street, while the carriage drives, which meander in all directions through the grounds, are carried over these thoroughfares upon substantial bridges, in order that the business that may be transacted across the grounds may not interfere with pleasure seekers.

Of course care is taken to spare the many fine trees already standing upon the grounds; and, in addition to these, large quantities of trees, thirty or forty feet in height, are being brought in and planted, with roots and tops nearly entire, so that they need receive little if any check from removal.

This great work speaks volumes for the foresight, liberality, and energy, of the great commercial metropolis. It is a work, indeed, which has no parallel on this side of the Atlantic; and, if we consider the extent and value of the ground appropriated, and its exceedingly forbidding character, we may question whether it is exceeded in the old world.

For much of the statistical information contained in the above, the writer is indebted to an article in the *Gardener's Monthly*, for January, 1859. For the privilege of examining an extended plan of the work, he is indebted to the courtesy of those in charge of the State Arsenal, adjoining the grounds. This has also been purchased for the benefit of the park, and is of course to be removed, or devoted to other purposes. Here are deposited large quantities of ordnance, and military equipage; among which the writer observed several pieces captured from the British during the revolution, each with the time and place of capture engraven upon it. These are no longer employed in the service, but are carefully kept as mementoes of the past.

As the week was now spent, the writer determined to remain until Monday, and improve the opportunity to listen to a sermon from that popular but somewhat eccentric minister, Henry Ward Beecher, of Brooklyn. Accordingly, at the proper hour, he set out for that purpose, anticipating some difficulty in finding the place; but it was only necessary, on reaching Brooklyn, to follow the greatest crowd. Reaching the church some-

what in advance of the time, it was found already filled with a dense crowd. A seat was however obtained, although a large number of listeners were less fortunate.—The most notable peculiarity of the speaker, to a person seeing him for the first time, is his apparent youthfulness, in contrast with the prominent position he occupies before the public. The discourse was marked by simplicity of diction, and was plain, practical, and pointed, with many home thrusts at the prevailing sins of business men, at whom it was chiefly aimed.

After the conclusion of the services the remainder of the day was devoted to a visit to Greenwood, the City of the Dead, which is distant rather more than a "Sabbath day's journey," but, as this was my only opportunity, I resolved to go. On reaching the place, and presenting myself at the entrance, I was informed that admissions on the Sabbath were restricted to holders of lots, in order to keep the place quiet on this day. In consideration, however, of the fact that I was a stranger, and alone, I was permitted to enter. The grounds are beautifully diversified with hills and ravines, of which the utmost advantage is taken, by the appropriate location of walks and drives, to increase the number of lots; which, as is usual in such grounds, are mostly located upon the sides and summits of the hills. Advantage has apparently been taken of the natural growth of timber; but the whole is profusely interspersed with evergreens of various kinds, and, for the most part, carefully kept. Many of the lots are neatly fenced, beautifully laid out, and planted with flowers.

The grounds embrace several beautiful sheets of water, supplied by jets d'eau, which, by the constant agitation of the surface, doubtless tend to prevent stagnation, besides adding much to the beauty of the scenery.

The labyrinthine arrangement of the grounds tends greatly to increase their apparent extent; but the real extent is far too great for even a general glance, within a visit of half a day.

In this forest of monoliths, by which money seeks to perpetuate a name, perhaps, in many cases, only notorious for extortion, or the "thrill that follows fawning," there are but occasional marked departures from one general idea: that of the single column; although a few were observed in the form of a chapel, with a vault.

Among those noticed, which were interesting to the general public as reminiscences of the past, were, one believed to be raised at the public expense, to the memory of the firemen who perished in the great fire, in the winter of 1855 and 1856; also a very modest column erected to the memory of George Steers, the designer of the yacht America, which won for our nation so enviable a reputation at the time of the great London exhibition; and also the designer of the Niagara, equally well-known for her performance in the laying of the Atlantic Cable. It was pleasant to reflect, while gazing at this unpretending shaft, that the genius that had elaborated these great results, had, at the same time, created for itself a name that will live long after this memento shall have crumbled to dust.

After wandering about till the lengthening shadows began to urge the necessity of departure, I turned reluctantly towards the entrance, and by dint of frequent inquiry, soon made my way out, and took the route to the city, to depart on the morrow for my western home.

T. T. LYON.

A TRIP UP THE HUDSON.

Looking about me on Monday morning, I found many and strong inducements to remain still longer in the city; among which were the opening of the Fair of the American Institute on the morrow, and the launch of the mammoth Russian ship, General Admiral.—I had also intended to visit the establishment of Wm. Reid, of Elizabethtown, N. J., but there were many places also to be visited on my homeward route, and the next week was to usher in our annual State Fair; so that I found myself obliged to forego the pleasure of longer continuance here. Accordingly I bade adieu to "mine host" of the Blauvelt house, and soon found myself coursing over the Hudson River Railroad, amid the grand and much-talked of scenery of that noble river. The rapidity with which a train is whisked along over this road, leaves but little opportunity to note objects of interest. Indeed, the manner in which we were hurried, now along the very verge of the stream, now directly out into its waters, and anon plunged into the base of some rocky ledge, or driven along the bottom of some deep and narrow ravine, was, occasionally, rather startling to one but little used to such scenery. On reaching Peekskill, I left the cars, and found myself in a small, unpretending, quiet place, with but little evidence of thrift or enterprise—apparently a consequence of the advent of railroads, which usually build up important points, but dwarf the minor ones.

Engaging a man and boat, I set out for Iona, to visit the establishment of Dr. C. W. Grant. Meeting him, on his way to Peekskill, to take the cars for Boston, his foreman took me in charge, and conducted me about the premises. The establishment is located upon an island, situated in a nook or bay, with an elevation of twenty or thirty feet above the river, while the mainland on each side, rises precipitously, more than a thousand feet; so that the grounds are effectually sheltered in all directions. Judging from what is still to be seen, the place, in its wild state, must have been very rocky and forbidding; but labor and money have, obviously, been employed without stint. The ground has been thoroughly trenched, and manured, to the depth of two and one half feet; and his plantations of grapes, to which he seems to be mainly devoted, give abundant evidence of satisfaction with this mode of treatment.

The Delaware Grapes that attracted so much attention at the recent Pomological Convention, were mostly produced here; and they were now (Sept. 20th) so far out of season that the finest specimens had disappeared. Enough were left, however, to give a good idea of the prolific character of the variety, and the exceeding beauty and richness of the fruit. It has been considered a weak grower, but this is now claimed to be the work of over propagation; and it must be acknowledged that the Dr.'s plants were abundantly vigorous. Shoots, once layered, had made growths varying from ten to fifteen feet, with the wood already well ripened.

The Diana, grown along side of this, rivals, or, possibly, exceeds it, if we consider size and beauty of coloring, but is far behind it in quality, and considerable later. It is a stronger grower than the Delaware, and much easier of propagation. A plant of this, in the grounds of the writer, set out last spring, was allowed to produce a single bunch, which ripened off in good season, and of good quality. It is beyond doubt a fine and valuable variety for our State, but it is said not to bear neglect like some other kinds.

Rebecca was also in bearing here, and is evidently worthy of all the praise bestowed upon it, so far as fruit is concerned; but it has shown considerable liability to mildew during the past season, which, should it prove a permanent difficulty, must become a serious drawback upon its value. This, however, as in the case of the Delaware, may be a result of over propagation, aggravated, perhaps, by the unfavorable character of the past season. Another year or two will doubtless settle this question.

Here, also, I saw the original vine of the Anna grape, for which the Dr. paid fifty dollars. This variety is now offered for sale for the first time. It appears to be a healthy, strong and vigorous grower; although the parent plant is far from healthy, having never, apparently, recovered from the shock of removal. Connoisseurs who have had the privilege of tasting, speak of it as a variety of much promise, but the writer had not thought so highly of it, although the specimens he tasted were hardly mature. Should the Rebecca prove a failure, this will probably prove our next choice for a hardy, native, white grape.

Clara is another recent seedling white grape of the finest quality, fruiting here; and, were its hardiness established, it would at once take the front rank; but it is, beyond doubt, the offspring of foreign parentage; and, although it is hardy within the city limits of Philadelphia, where it originated, its hardiness, elsewhere, is generally considered quite problematical.

The Dr. has also quite an extensive vineyard, mostly planted with Isabellas and Catawbas, which he cultivates in the thorough manner already described, for the production of fruit for the market.

Here also I saw a few young plants of Downing's Everbearing Mulberry, which is now for the first time offered for sale. It is an exceedingly rapid grower, making single shoots of almost fabulous height. It will doubtless be much sought after when once known, as, in addition to its everbearing quality, its fruit is of excellent flavor.

The head of this establishment seems to aim at the procuring and propagating of novelties in his line of business, to supply the first demands of the market, at high prices. The state of his grounds clearly indicates that he understands his business, while his schedule of prices shows that he keeps a sharp lookout for the main chance.

After spending two or three hours here very pleasantly and profitably, a boat belonging to the establishment conveyed me to the adjacent landing, where I took passage by the river steamer for Newburg.

T. T. LYON.

Plymouth, January 19th, 1859.

The Gladiolus.

The varieties of the *Gladiolus racemosus* and *floribundus* may be planted in May, in a light soil, well manured with old cow manure. The space to be kept between the strong flowering bulbs, where they are planted in beds is from six to eight inches. The bulbs after the flowering season is over should be taken up and dried, and placed where they will not suffer from the frost.

THE PEAR.

BY PROF. J. C. HOLMES, LANSHIRE.

(Continued from page 27.)

Van Mons commenced his experiments in a nursery bearing the name of La Fidelite, but being called to be Professor of Chemistry at the University of Louvain, he transferred, in 1819, his seedlings to that place, and he continued his researches until 1842, the time of his death. The first catalogue of his new varieties was printed in Louvain in 1823. He did not prefer the seeds of the finer varieties to plant to obtain more ameliorated kinds, but his theory and practice was, to select the most thorny plants, provided they were furnished with many buds, placed very near together; these plants were fruited, the seeds carefully gathered and planted; the seeds produced by the fruiting of the second generation were as carefully gathered and planted as before, and this process was continued, each successive generation producing more ameliorated and valuable fruit, until, in the fifth or sixth generation, some very superior fruits were found, intermixed with those of a middling quality. Van Mons held that this was the only true way to procure vigorous and healthy trees and fine varieties. For, he says, in proportion as a fruit becomes removed from a wild state, by planting always the seeds of the last production, in that same degree will the fruit become ameliorated, until it attains the highest perfection of which a fruit is susceptible. During the process of amelioration, and of each successive remove, the austerities, or superabundant acid, which is the peculiar characteristic of the wild fruit, is diminished, and the saccharine matter is increased. But as a certain quantity of acid is an essential ingredient in every perfect fruit, it will appear self evident that the process of regeneration, when carried too far, may prove injurious.

Van Mons was very successful in the production of new and valuable varieties. In his nursery he had over eighty thousand seedlings. It is said that he added to the list of pears over eight hundred new and valuable sorts. Andre Leroy, of Angers, France, advertises in his catalogue for 1856, 586 varieties of the pear; forty of these varieties originated with Van Mons.

Van Mons held that hybridization tended to degeneracy, but Mr. Knight thought otherwise, and he was as enthusiastic and untiring in his efforts to produce new varieties by hybridizing, as was Van Mons by his process.

Thomas Andrew Knight was born at Wormsley Grange, in Herefordshire, England, August 12th, 1759, and died May 11th, 1838, in the 80th year of his age. He was a celebrated horticulturist, and vegetable physiologist. As President of the London Horticultural Society, he was highly esteemed. He was the author of many valuable books, and was a frequent contributor to horticultural publications. In a letter to a friend he says: "I was early led to ask whence the varieties of fruit I saw came, and how they were produced; I could obtain no satisfactory answer, and was thence first induced to commence experiments, in which through a long life of scarcely interrupted health, I have persevered, and probably shall persevere as long as I possess the power."

The course preferred by Mr. Knight for the amelioration of the pear, and for the production of new varieties, was to plant seeds of the wild pear, and when the stocks raised from these seeds were in blossom, impregnate them with pollen from some valuable variety.

Van Mons' theory was to sow, and continue to sow, from generation to generation, and the result will be an abundance of valuable varieties.

Mr. Knight, wishing to arrive at the same result in less time, and by an easier, and as he thought, a better method, preferred to hybridize, as stated above; but Van Mons seems to have been far more successful in accomplishing his object than was Mr. Knight.

In the same nursery catalogue of pears, as before quoted, I find but two varieties that were originated by Mr. Knight, viz: *Dunmore* and *Knight's Monarch*.

But, while European horticulturists have been experimenting, and giving to the world new and valuable varieties of fruits, our own countrymen have not been idle.

The late General Dearborn, and Robert Manning, of Massachusetts, were successful cultivators of the pear; they originated some new varieties, and were correspondents and admirers of Van Mons, and recipients of scions of a great many of his improved varieties of pears.

At the present time, several cultivators are experimenting with seedlings and hybrids.—The Hon. Marshall P. Wilder, of Boston, Mass., is among the foremost of American pomologists; he is not only an enthusiastic, but he is a successful cultivator. In fruits, the pear is his hobby. In a late address, he says: "Give us pears! the most exquisite sorts, where we can grow them—but by all

means give us pears! pears for ourselves, for our families, for the millions who are about us, and who are to come after us."

In another address, in speaking of the various methods practiced for obtaining new varieties of fruits, he says: "Many cultivators, as Esperen, Bivort, Berckmans, and others, both in this and foreign countries, have sown seeds in variety, and obtained some valuable sorts. But I am confirmed in the opinion, that the best means of producing new and excellent varieties, suited either to general cultivation or to particular localities, is to plant the most mature and perfect seed of the most hardy, vigorous, and valuable sorts; on the general pathological principle that like produces like, and upon the conviction that immature seed, although the embryo may be sufficiently formed to vegetate, yet not having all its elements in perfection, it will not produce vigorous and healthy offspring."

Col. Wilder has had extensive practice, not only in the raising of seedling fruits, but of flowers also; some of the most beautiful Camellias ever grown in this country were raised from seed by him. I have had the pleasure of rambling through his grounds and examining the fruit trees in bearing, seedlings in various stages of growth, and scions of many new varieties of the pear placed upon quince stocks to bring them into early bearing, that the fruits may be tested with as little delay as possible. It will thus be seen that he is not a mere theorist with regard to raising of seedling fruits, but his opinion, as above expressed, is based upon practice.

Hovey, Cabot, and many other practical horticulturists in Massachusetts, have been for many years engaged in the production and introduction of new and valuable varieties of the pear.

L. E. Berckmans, of New Jersey, is a practical horticulturist, an enthusiast in pear culture.

In the *Horticulturist* for January, 1859, I notice a beautiful group of Van Mons pears. The specimens from which the drawings were made were furnished by Mr. Berckmans; he had large experience in pear culture in Europe, and a few years since migrated to this country, bringing with him a large collection of pear trees, of the most valuable varieties. He is a frequent contributor to the columns of the *Horticulturist*, and to *Hovey's Magazine*, and very deservedly ranks on the roll of eminent pomologists of this country. He is one of the intelligent workers, and has been successful in introducing to the notice of fruit growers many new and valuable sorts of the pear.

Messrs. Ellwanger & Barry, of Rochester, N. Y., Dr. Kirkland, of Cleveland, A. H. Ernst, and Dr. Warder, of Cincinnati, Ohio, are successful cultivators of the pear. But our Ohio friends have given their attention more to the production of choice varieties of the cherry, grape and apple, than the pear.

But, to come still nearer home; Detroit is noted for her large pear trees. When, and by whom these trees were planted, I do not know. I presume, however, that many of them were raised from seed by some of the first French, or English settlers. At the present time there are a few amateur fruit culturists in Michigan, who are engaged somewhat extensively in the cultivation of the pear.

The best, and most extensive pear orchard that I am acquainted with in Michigan, is owned by the Reverend Mr. Hunter, and is located on Grosse Isle. Mr. Hunter is very enthusiastic and successful as a pear grower. It would be gratifying to his friends if he could be induced to give an occasional inkling of his experience through the columns of the *MICHIGAN FARMER*. There are several amateurs in the vicinity of Detroit, and also in other parts of the State, that I would like to hear from, upon this subject, through the same channel.

(To be continued.)

HORTICULTURAL NOTES.

Vegetable Seed Catalogue.

The Messrs. Thorburn & Co., of New York have forwarded to us their Catalogue of Vegetable and Agricultural seeds. Amongst those noted, we remark the Asparagus or yard long Bean at \$2.00 per quart, and the Lenormand Cauliflower \$2.00 per oz. The assortment of Peas is very full, and comprises all the new and tried kinds that have proved to be valuable.

A New Plant.

The shrub introduced from China by Mr. Fortune, to the Horticultural Society of London, under the name of *Spiraea grandiflora*, has proved itself quite hardy and to belong to another genus; it is now called the *Exochorda grandiflora*. The flowers withstand the spring frosts, and the latitude of London begin to appear about the middle of April, and continue till the end of May; they form beautiful spikes of pure white, which stand erect above the branches and are as large as those of a Philadelphia.

Advice to Young Gardeners.

An experienced writer on propagation says, "Never increase climbers or plants from suckers. The like never produced the like more to the latter than do these plants from suckers. Destroy all suckers, is my maxim."

SHADE TREES.

BY EDWARD MASON.

Continued from page 27.

There are some varieties of the willow which are extremely useful for basket work, and on this account the raising of them is very profitable. All trees and shrubs of this kind thrive best in rich, moist soils. When required for basket work, they should be set out in regular plantations, in low situations, near the banks of rivers, and in other places, where there is an unfailing supply of water; for, although these trees can be raised on almost every description of soil, they thrive best in localities where the roots are entirely covered with water, for at least a portion of the year. Among European willows, the following are highly esteemed for utilitarian purposes: *Salix Alba*—the White Willow—This tree grows to a very large size, and produces excellent timber. The Russell Willow—*Salix Russelliana*, and the Brittle Willow—*Salix fragilis*—are also good timber trees. The Golden Osier—*Salix viminalis*—is a very ornamental tree. The young shoots of this variety, when properly cultivated, are highly esteemed for the finer kinds of basket-work. For the same purposes, the *Salix Forbiana*, and the *Salix Helix*, or Rose Willow, are much valued. The best variety for hoops, is the *Salix Viminalis*; (its specific name de notes that it may be wound or twisted;) and the young shoots of this willow are in great demand for the coarser kinds of basket-work. There are some of the native willows which might be cultivated in Michigan, with profit, as they appear to be adapted for hoops, or basket work. The large kinds make good shade trees, and are worthy a place near the farmers dwellings, whilst the smaller and finer varieties might be cultivated in swamps and other moist places.

The bark of some trees of the willow kind is considered as valuable for tanning as that of oak or hemlock. An extract called "Salicine" is obtained from that of others; the varieties most valuable for yielding this medicine, are the Russell and Rose willows; and it is said to be as efficient in low fevers and ague as the celebrated Peruvian bark.

The leaves and young shoots of willows are very nourishing forage for cattle, and in some countries of northern Europe they are collected and stacked for this purpose. It will be seen that willows are extremely valuable, some for shade and ornament, others for manufacture and medicine. They are all easily propagated, growing freely from slips or cuttings; the choice kinds can be obtained from every respectable nurseryman.

The *Ailanthus glandulosa* is a native of the northern provinces of China; it is said to have been introduced into England in 1751 by a Jesuit missionary, and found its way into the United States in 1784. It thrives well in this country, and its pinnate leaves and wide-spreading branches cause it to be much esteemed as an ornamental tree. In the manner of its growth, and the appearance of its leaves, this tree bears considerable resemblance to the sumach, and according to the natural system of Botany, has a close affinity to it.

THE EASTERN PLANE—*Platanus Orientalis*—is a native of the south of Europe, and northern Africa and Asia; it is a beautiful tree, and its merits have been celebrated in song and story: it is well adapted for a shade tree, and it has been used for this purpose by the Greeks and Romans. It has not as yet been much disseminated through the United States, but its place is very well supplied by the Western Plane, or Button-wood—*Platanus Occidentalis*—a tree which is very common in the forests of the United States, and much used in some places as a shade tree; it forms a fine umbrageous head, and the leaves are large and showy, but it is somewhat liable to be killed by blight.

THE ASH—*Fraxinus Acuminata*—is not much used as a shade tree in the United States. It is nevertheless a picturesque and ornamental tree, and may be seen adorning the parks and lawns of the nobility and gentry in every part of Europe. When the ash is planted separate from other trees, and becomes fully grown, the branches droop to the ground and then turn upwards, a peculiarity which adds considerably to the beauty of its appearance. The American White Ash bears a very striking resemblance to the White Ash of Europe—*Fraxinus excelsior*—a tree which was celebrated among the ancients for its many useful properties. Both Hesiod and Homer mention it in terms of praise. Several ancient writers assert that serpents have a great antipathy to this tree. Pliny says that if a serpent be placed near a fire, and both be surrounded with ashens twigs, the serpent will sooner pass through the fire than the twigs. Dioscorides men-

tions that the juice of ash leaves mixed with wine is a cure for the bite of serpents, and the North American Indians are of the same opinion as the ancients respecting the virtues of the ash; they esteem its juice an antidote for the poison of the rattlesnake, and assert that all serpents have a wonderful antipathy to the White Ash, and avoid it with the greatest care. There are several varieties of the ash that are worthy a place in every collection of ornamental trees. One of these is the Weeping Ash, which, although it does not grow to a large size, is very picturesque, and answers well for contrasting with upright trees. The Weeping Ash cannot be propagated by seed or suckers, it must be grafted on stocks of the White or Black ash. It is well calculated for ornamenting parks and pleasure grounds.

THE AMERICAN FLOWERING ASH, *Ornus Americana*—known also as the Mountain Ash, is a small tree of great beauty. Its large tufts of greenish white blossoms in summer, and bright red berries in autumn are very ornamental. A few of these trees scattered through a park, lawn or shrubbery have a fine appearance, and in the fall, assist in variegating the hues of the fading foliage of deciduous trees.

THE HORSE-CHESTNUT—*Esculus Hippocastanum*—is a very beautiful tree; its flowers and foliage are extremely ornamental, but it is somewhat tender, and does not attain a large size in the Northern or North-western States. It cannot be considered a good street tree, as it thrives best in sunny aspects, and requires to be sheltered from storms by harder trees. When it is partially protected from the wind by distant, not contiguous trees, it forms a fine umbrageous head, remarkable for its dark green foliage, and pyramidal flowers. In Europe the Horse-chestnut grows to a very large size, and is much used to ornament public parks and promenades.

There is a celebrated Chestnut tree in Paris, in the garden of the Tuileries, which comes into leaf early in March, and is remarkable for bearing a profusion of very beautiful flowers. It has outlived three powerful dynasties, and if there were "tongues in trees," could tell eventful tales of the Monarchy, the Republic, and the Empire.

There are some fine varieties of the Horse-chestnut; among the best and most esteemed, are the pink-flowered, red-flowered, and flesh-colored. These trees are so easily propagated, and so desirable a tree that they should be found near every house, especially in the country.

THE BASSWOOD OR LIME—*Tilia Glabra*—is a despised and neglected tree, in almost every part of the United States and British America, yet there is scarcely a tree in the forest, that can equal it in beauty, when it is properly managed and judiciously placed. In every part of Europe the Lime is chosen to beautify the parks and lawns of the nobility and gentry; and even in the royal demesnes, it is placed in the most prominent situations. The American Lime would equal its European congener in beauty, if the same amount of care and attention were paid to its training and management. The Basswood would make an excellent street tree if raised in a nursery, and headed down at a suitable age, in order to make it form a fine head; it would also form a fine shade tree near the rural homestead.

Young Basswood trees may be found on the edges of clearings and other openings in the forest, which, if headed down a few years before they are removed, will throw out lateral branches, and ultimately make very fine shade trees.

There are several kinds of nut-bearing trees which might be made to do duty as shade trees, around the farmer's homestead, and at the same time, yield a large quantity of excellent fruit; among these the most desirable is the Black Walnut, which grows to a large size, and bears beautiful foliage and good fruit. The European walnut is an ornamental tree, but we think it inferior to the American, both in fruit and foliage. The Hickory can be obtained from the forest and will well repay for the trouble of transplantation. The wild Cherry should be planted near every farm house, as its fruit is useful for various purposes, and it also possesses the desirable properties of coming into leaf early in the spring, bearing a profusion of snowy blossoms, and adding to the beauty of the lawn or orchard in the fall, by the brilliancy of its changing foliage.

(To be continued.)

Devon Stock for Sale.

Geo. Vail of Troy New York, offers for sale his whole herd of Devon stock. Amongst them is the bull May Boy, which was imported from the herd of John Farmer Davy, the editor of the English Devon Herd Book. Mr. Vail offers this stock on a twelve month credit.

Meeting of the Board of Agriculture.

Our impression is that there never before assembled in this country so many gentlemen justly famed for their services in the cause of agricultural progress, as are now embraced on the roll of the board now in session in this city. Though among them—some sixty in all—there are some who may be inexperienced, and some who are simply ambitious of having their names connected with the deliberations and actions of such a body, these are few, indeed, compared with the number of them who have great agricultural and horticultural experience, or who have devoted long years to the cause of agricultural science as investigators and writers upon the subject.

Much complaint has been made over the country on the ground that the business of the Agricultural Bureau of the Patent Office has been managed wholly under the advice of theorists, bent especially on building up an Agricultural department of the Government, really foreign to the constitution in its aims and tendencies. We have every reason to believe that it was resolved to assemble this board, in great part, in order to do away with the impression so industriously sought to be made general. In their recent brief addresses to its members, the Secretary of the interior, and the Commissioner of the Patent Office, distinctly stated that they had been assembled to revise the list of questions to be sent over the land, with the view of carrying out the law of Congress, directing the procurement of thorough and complete agricultural statistical information now so greatly needed in the transaction of the business of the Interior Department of the Government—to suggest, after a careful study of them, such alterations and amendments as their individual and conjoint experience may assure them is proper. They are also themselves to answer as many of them as each member of the Board can.

Heretofore efforts have been made by the Department to obtain precisely such information as this Board is expected either to furnish or to prepare to have furnished without further cost to the Government. The cost of these abortive efforts, made through the agency of individual agents sent over the country, has of course been much greater than the expense of assembling this board here will be; for it is to cost the treasury but two thousand dollars in all, most of the members giving their services in the good cause, and paying their own expenses while so doing. On the first two days of the session of this board, a disposition was manifested by some of its components to have it undertake the duty of recommending some distinct course of Congressional legislation and Executive action for the benefit of agriculture; which subject, on being discussed for a few hours, was quietly and very properly laid on the table by an overwhelming vote, as being entirely foreign to the true object of the convocation. This action was in just keeping with the high reputation of the leading members for practical sense.

We mentioned above that many of the most distinguished advocates of agricultural and horticultural progress, are lending their services to the Government in this matter. Among them we may name Marshal P. Wilder, Esq., of Boston Mass., for eight years the President of the Massachusetts State Horticultural Society, the founder, and for six years the President of the National Agricultural Society, and also President of the National Pomological Society—a gentleman, whose labors for many years have been of infinite service to the cause in which he is so deeply interested; Mr. Tilghman, of the Eastern Shore of Maryland, the present President of the National Agricultural Society, one of the most successful farmers of his State; Mr. Carey, the President of the flourishing and useful Agricultural School at College Hill, Ohio, near Cincinnati; Mr. Gowen, of Philadelphia, the owner of a large Pennsylvania farm, regarded by many as the model in that State, for its enlightened management, who, by-the-by, founded the Mount Airy Agricultural School, than which no other in this country has proved more beneficial in spreading practical agricultural science and information; Mr. Ewing, an extensive and very successful farmer in Western Pa., widely known for agricultural enterprise; Mr. Calvert, of Maryland, the projector of the Agricultural College of his State, long the President of the Maryland State Agricultural Society, and well known here, as throughout Maryland, as having devoted, for twenty years past, not only a considerable portion of his time and his highly cultivated mind, but of his large wealth gratuitously, to agricultural progress; the two Messrs. Bowie, of Prince George's, Md., one as justly famous for successful breeding and improvement of sheep of English blood, as the other, a planter on the Patuxent, is for his writings in the American Farmer, and his management of his own estate; Mr. Clement Hill, of the same country, one of the largest tobacco planters of Maryland, and at this time the first in

the ranks of Maryland's many breeders of short-horn stock; Mr. Kennicutt, of Illinois, the founder and the Secretary of the Illinois State Agricultural Society, known throughout the Northwest as being the very head and front of agricultural progress there; Mr. Holbrook, who has been the President of the Vermont Agricultural Society since its foundation, a gentleman of great practical knowledge; Mr. Bartlett, of New Hampshire, former editor of the Boston Cultivator, on the tripod of which he was, as is well known, a very important lever in behalf of agricultural progress; Mr. Holmes, of Maine, the Secretary of the Maine State Agricultural Society, and the founder and editor of the Maine Farmer, a capital weekly agricultural journal, as we well know; Mr. DeNeveu, of Michigan, a farmer who sells annually from his fields and orchards perhaps 10,000 bushels of wheat, and 5,000 barrels of apples; Mr. Hammond of South Carolina, one of the most extensive planters in his State, as well as by far the most distinguished writer in that quarter of the Union on agricultural subjects; Mr. Bergwyn of North Carolina, a planter and farmer of enterprise commensurate with his immense capital invested in agriculture, than whom no other gentleman in the United States is more liberal in his expenditures upon agricultural experiments. Among those of the body who reside here, or in this immediate neighborhood, whose labors in behalf of agricultural progress, are well known to all here interested in the subject, we may mention Mr. Joshua Pearce, the veteran horticulturist and nurseryman, who has diffused improved fruits and American ornamental forest trees and flowers as extensively over the land, as almost any other nurseryman in the Union; Mr. W. W. Corcoran, who carries on, we believe, three farms at this time, each of which is devoted for the most part to agricultural experiments, without regard to the cost of obtaining results from them beneficial to the future of American agriculture, and whose green-house in this city is not only one of the most extensive private ones in this country, but one of the best managed; Mr. Joshua Seaver, than whom there is no more thrifty and successful farmer within fifty miles of the Federal Metropolis; Mr. Lewis Baily, of Fairfax county, Va., whose fine, pure bred Devons have been the admiration of Maryland and Virginia Cattle shows for the last decade; Mr. J. S. Bradford, of Culpepper county, Va., on whose farm of eight hundred acres there are, perhaps, more miles of under-drains laid than on any other in the Old Dominion, who at times, has fifteen hundred full-blooded Merino sheep under his own shelters, and has made, in the last ten years, as much *pro rata* clear profit on his capital, invested as it is, wholly in legitimate agriculture, as any other farmer on this side of the Atlantic.

But we might extend this list, so as to fill with it a page of to-day's issue of the *Star*. The public will however perceive without such an extension, that we are entirely correct in the impression that this Board is not only competent to aid the laudable purposes of the Interior Department for which they were assembled, but are not to be dreaded as men bent on revolutionizing the Government in a wild chase after consolidation by means of the lever of a new Agricultural Department, to be charged with the duty of interfering in affairs of the people in matters in which the general government should keep "hands off."—*Washington Star*.

FARM MISCELLANEA.

Ayrshire Cattle in Massachusetts.

"In Massachusetts, the improvement of dairy stock by the introduction of Ayrshire blood, has become so apparent, that no argument could induce those acquainted with their value to return to the hazards of native breeding. We could point to farmers in Essex, Middlesex and Worcester counties, who, under the most prudent management, avail themselves of every opportunity to introduce Ayrshire blood into their herds, and our own observation teaches us that the importations of the Massachusetts Society for Promoting Agriculture, of Capt. Randall, of New Bedford, and others, have been vastly beneficial to our dairy stock. The bulls of this breed can be traced wherever they have been by the good stock they have left behind them. One of them was kept upon a secluded farm in Essex county, and rendered it famous for its fine dairy cows. Another gave superior character to the herd of one of our well known farmers, and to all the dairies in his neighborhood. An imported Ayrshire cow, not far from us has produced through a variety of mixtures and pure breeding, a little herd of cows and heifers of the highest uniformity of excellence. We might enumerate a tedious catalogue of such cases as these.—*Salem (Mass.) Advocate*.

Worms in Horses.

Some veterinarians tell us that the parasites complained of do no injury. We never could quite agree with that opinion. All will probably admit that the worms do the horse no good, and it is therefore safe to get rid of them by any simple remedies. We have known a teaspoonful of sulphur given daily, for a month—the result being the discharge of many worms. We have also known a decoction

of bone-set (*Eupatorium perfoliatum*) sweetened with molasses, to produce a similar effect. Perhaps others can tell of better remedies.—*Boston Cultivator*.

One of the advantages of Draining.

Silas Brown of Massachusetts, writes to the *Boston Cultivator* that amongst the advantages he has observed to arise from draining, he has found that it has very much diminished the number and depredations of the wire-worm.

Extraordinary Operation on a Horse.

One of the most wonderful (so wonderful in fact that we should feel inclined to doubt its accuracy were we not informed upon the most undeniable authority) that the records of the veterinary art contains, has lately been performed in England by Mr. George Holmes, of Beverly, a veterinary surgeon. The animal operated upon was a valuable black horse belonging to Mr. Metcalf, of Walkington Wold, which was suffering from water on the chest, and from which Mr. Holmes succeeded in extracting the enormous quantity of 15½ gallons of water at one drawing. This extraordinary operation was performed without a second operation being necessary, and although only a short time since, the horse is perfectly well, and it will be difficult to detect that anything had ever been the matter with it or that any operation had been performed; in fact the horse is doing all the ordinary work with the rest of the team, and has regained its condition to the fullest extent. This is the only instance on record where such an operation has been performed with any degree of success. How the animal had lived with such an enormous quantity of water on the chest was sufficiently extraordinary. We are informed that he was fast drowning; but the fact of its being extracted without the slightest injury is positively wonderful.—*New York Spirit*.

Allen Sontag.

The Messrs Ladd, Brothers of Richmond Ohio, have purchased a colt named Allen Sontag for \$1600. This colt was foaled the 7th of June, and is from the celebrated trotting mare Sontag and by Ethan Allen. Sontag herself was sired by Harris's Hamiltonian, he by Bishop's Hamiltonian; and he by imported Messenger. The dam of Sontag was a bay mare by Nicholas 1st. Sontag herself is somewhat famous for beating Flora Temple in three short heats. In a private trial made soon after the match, Sontag showed the extraordinary time of a half mile in 1.08 but she soon after wrenched her pastern joint, when she was purchased as a breeder by S. R. Browne, Flushing. This is her first colt, and he is expected to help in improving the stock of Ohio.

Arabs and English Horses.

I promised you some further remarks on the "Stallion Controversy," respecting which I have been trying to pick up and collect facts and opinions during the past summer and autumn.

The Persian horses must, I fear, be given up: they have been tried both in India and Austria, and found to lack breadth and depth of chest, so that their progeny is weedy. Such at least is the report of the only two authorities that fell under my observation, one in print, the other communicated to me personally.

As to the Arabs, all my informants are agreed, that a good Arab is remarkably hardy, gentle, and generally serviceable as a hack, but in speed and weight-carrying power far behind the English horse. The best Arabs seem to be in the same category. An English officer, after praising the Barb that had carried him in his Crimean campaign for various good qualities, wound up with, "But after all" you will never catch me going into action again without a blood charger: he can carry you out of reach of the shot." Not a very valorous-sounding speech for a Crimean hero; but the bravest men are not those who make the most parade of their valor—a hint to our friends the French.

The Arab discussion is going on very briskly in England just now. On one side it is affirmed that the diseases of wind and limb so prevalent in thoroughbred stock require to be corrected by an infusion of the sounder Eastern blood; on the other side it is maintained that these diseases are solely owing to the unnatural system of short courses and two-year-old races—everything sacrificed to speed and speed prematurely attained.

Now in transferring this discussion to our own country, we must bear in mind what the English want to remedy. Obviously it is defective wind and limb. In the matter of legs, and feet especially, they now pretty generally acknowledge that our horses are superior to theirs. Thus the "Field" recently advocated the importation of American trotting stallions, to improve the understanding of John Bull's harness stock; and similarly we learn that Sir Joseph Hawley bought Charleston for \$3,000—not so bad a price after all for a broken-down second-class racer. But what do we most want? What are our desiderata? It seems to me, first, in a sporting and fancy way, to get a little more speed into our blood stock, which is inferior in this respect (there is no use of mincing the matter) to the thoroughbred of England and France; secondly, in a general way to prevent our horses (harness horses especially) from becoming undersigned. How can the Arabs help us to secure either of these objects? They are small horses and they are not swift. One of the "Field's" correspondents, it is true, insists on "the expanding power of the desert blood." It may "expand" in some places, it certainly does not everywhere. Witness the King of Wurtemberg's stallion, frequently alluded to in former letters.—*Carl Ben son, in New York Spirit*.

NEW ADVERTISEMENTS.

J. L. HURD & Co., Wheat, Oats and Corn wanted
A. FAHNESTOCK & SONS, 900,000 Trees.
F. E. ELDER, Glen Black Hawk.

ANSWERS TO CORRESPONDENTS.

J. McCa, Cass Co.—Your sugar inquiries will be attended to. J. S. Tibbits of Plymouth, has Suffolk pigs very pure bred, and F. E. Elder of Detroit, bought a fine large boar, the son of imported Ajax, from which he is breeding, whether either of these breeders have any to sell or not at present I cannot say, as they do not advertise.
J. S. T.—Your letter received, and will appear soon.
D. M. F.—Pedigrees received, and will appear next week. Note deferred until a personal examination is afforded by visit, of which due notice will be given.
D. D. T.—Your experience with the Sorghum is received, and is on file.
Stock Breeder, Moscow.—The Messrs. Fallington live at Darby Plains, Union Co., Ohio. The address of R. G. Corwin is Lebanon, Ohio.
J. S. T., Ohio.—Your samples of wool are received. The examination of your wools will cost \$5.00, and engravings \$3.00 each. The examination of wool for private benefit should be paid for, just as much as the services of a doctor or lawyer. We have had two hundred samples sent us, and from those were selected all those needed for public instruction.

MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

SATURDAY, JANUARY 29, 1859.

THE AGRICULTURAL CONVOCATION AT WASHINGTON.

It is generally known that a meeting of citizens selected by the Commissioner of the Patent Office, has been held at Washington, to advise with him in relation to matters connected with the more efficient conduct of the agricultural department at Washington, and to give advice and to suggest measures adapted to aid the progress of improvement in all that relates to agriculture.

The citizens thus chosen were to be allowed certain traveling fees, and a certain per diem, for expenses while in Washington. This body met during the last week in January, entered into consultation with closed doors, and adjourned on the 12th, after a session of two weeks. What they did is as yet unknown. We have looked at all the usual sources of information for some inkling of what this body has been doing, and what they proposed to do, but with the mere statement that they met, and proposed to call themselves "The Advisory Board of Agriculture of the Patent Office," we have as yet learned nothing of their doings. Whilst we have noticed some allusions to the members in the correspondence of many of the newspapers, nothing definite has been stated. It is a curious fact, that whilst all the movements of the cabinet, all the doings in secret executive sessions, and even the untold intentions of the President, are intimately known to the excellent and most sagacious representatives of the press at Washington, not one of them can find out anything of the proceedings of the "Advisory Board." This "Board" must therefore be considered as one of the "patented" secrets for raising crops and stock, equal to the notorious "terra culture" of Russell Comstock. We have as yet no comment to make on this body, because we are unwilling to prejudge it, before knowing for what result the mountain labored. Meanwhile, we publish on another page an article from the Washington Star, which, though not very satisfactory, is the most precise in its representations of any that has yet been noticed. In this article our readers will observe that Michigan is said to be represented by "Mr. DeNeveu," "a farmer who sells annually, from his fields and orchards, 10,000 bushels of wheat and 5,000 barrels of apples." We have never heard of this gentleman before; there may be such a man in existence, and there may be some farmers in this State who have orchards that produce five thousand barrels of apples, and whose fields grow ten thousand bushels of wheat; we have not yet made their acquaintance. Because we do not know them, we do not say they are myths. The gods forbid! But when we know that for the past five years the average production of wheat in this State has not been over ten bushels to the acre, we have to say that we would have been likely, in some of our peregrinations, to have come across that thousand acres of wheat grown by one man, as well as his orchard that must have had at least from twenty-five hundred to three thousand bearing trees. That gentleman, also, must have had some stock to use up all the straw that produced his immense crop of wheat. We have never heard of his immense herd of cattle, or the hogs or the sheep that fed on the refuse of the orchard, nor even of the barns that accommodated the work horses, and protected the crops; nor are we aware of the village composed of the dwellings of the hired men, and their families, who work this tremendous farm, which in a four years rotation must be composed of at least four thousand acres, besides having large tracts of

woodland attached to it. We are really anxious to know this magnificent Michigan farmer, whom the Patent Office at present has got the sole right to, and where he resides. Will some one enlighten us? so that we may set his light on the top of our bushel. If all the members named in "The Star" are like our member from Michigan, there must have been "some pumpkins" at the capitol just about the time that convocation met!

The Wool Illustrations.

We call the attention of sheep breeders to the lesson taught by the specimens of wools which we exhibit in the present number. It will be noted that the wools of the pure bred sheep have been placed along side of the cross breeds, for the purpose of comparison, and it will be noted that in all the wools from cross bred sheep there is the same leading character, namely *unevenness* in the fibre; whilst in the wool of pure bred animals the wool fibres are perfectly even. So much is this the case, that the moment that wool is viewed through the microscope, the truth is made known. A short time since an examination of a wool sent to this office by a breeder well known, as from the fleece of pure Spanish Merino, and the winner of the first prize at the State fair. This wool was examined, and pronounced bad, and indicative of being a cross, though remarkable for fineness. Within a few days after, a note was received from a first rate experienced judge of sheep, suggesting that he had often seen Mr.—bear off the prizes, but he thought from appearance, that the sheep which he exhibited, showed that they had some Saxon blood. The examination by the microscope led to the same conclusion. It will thus be seen how it may be proved that an animal is a pure or a cross blood. This is a very important discovery in regard to wool, and one which, as far as we know, has never been observed before.

The Swamp Lands.

The Committee on State affairs in the State Senate, have recently made a report on this important subject of the reclamation of the Swamp Lands. This report we have not as yet seen, but take from the Detroit Tribune, the following synopsis of its design and of the bill accompanying the report. We shall notice this subject more at length when we have the full report and bill before us for examination.

The report recommends first the construction of a system of roads as the most feasible method of providing for the ditches. This system of roads is to consist of

- 1st. A road from Lansing via Little Traverse Bay to the Straits of Mackinaw, to be known as the Lansing, Traverse Bay and Mackinaw State road.
- 2d. A road from Grand Rapids via Grand Traverse Bay to the head of Little Traverse Bay, to be known as the Grand Rapids and Grand Traverse Bay State road.
- 3d. A road from Port Huron via Saginaw River to Pere Marquette on Lake Michigan, to be known as the St. Clair and Pere Marquette State road.
- 4th. A road from East Saginaw via Bay City, Ottawas Bay and Thunder Bay to the Straits of Mackinaw, to be known as the Saginaw, Thunder Bay and Mackinaw State road.
- 5th. A road from St. Mary's Falls to the Straits of Mackinaw, to be known as the St. Mary's Falls and Mackinaw State road.
- 6th. A road from the Straits of Mackinaw via Marquette on Lake Superior, L'Anse Bay and Ontonagon to the Wisconsin State line, to be known as the Mackinaw, Marquette and Ontonagon State road.
- 7th. A road from L'Anse Bay, southwardly to the State line, to be known as the L'Anse Bay and State line road.
- 8th. A road from Marquette via Little Bay de Noquette to the mouth of the Nemominee River, to be known as the Marquette, Bay de Noquette and Nemominee State road.

Railroad freights on Plaster and Wheat.

The last number of the Jackson Patriot, contains the proceedings of a meeting of the Executive Committee on the subject of a reduction of the tariff on wheat, flour and plaster. The Committee after a full discussion of the importance of the subject, to the producing classes of the county of Jackson, and the State adopted the following preamble and resolutions.

Whereas, In the opinion of the Executive Committee of the Jackson Agricultural Society, not only the interests of the farmers of Jackson county and all Michigan, but the stock-breeders of the several lines of Railroads in this State, would be greatly promoted by a reduction of tariff for the transportation of wheat, flour and plaster, especially the latter, therefore encouraging the cultivation of the great staple of the State. Wheat, it is well known, has rapidly decreased for a few years, therefore

Resolved, That we respectfully call the at-

tention of the managers of the several railroads in this State, to the necessity of so adjusting the tariff on the above named articles, as to encourage the production of wheat, and to bring plaster within the reach of the State at prices that would warrant its universal use, thereby increasing the growth of the one great staple to an extent that would greatly benefit, not only the farmer, but the transportation interests of the State.

Resolved, That we appoint a committee of three to present the subject to the managers of the Central and Southern Railroads, and urge upon them the necessity of immediate action.

The State Legislature.

The Committees appointed to visit the Flint Asylum for the Deaf, Dumb and Blind, and the Asylum at Kalamazoo for the Insane, have made reports strongly in favor of making appropriations to sustain these institutions.

A bill has been introduced into the Senate to restore the death penalty.

A bill has also been reported for the protection of game.

There has been some movement made toward granting aid to the people of Gratiot and Midland counties, recommended by the Governor in his Message. We hope the legislators will not allow the horse to stave whilst he is waiting for the grass to grow. The bill has eventually passed.

A bill has been introduced to provide for the publication of the reports of the proceedings of the Board of Supervisors, in at least two of the county papers of each county in the State.

A bill has also been reported, making it the duty of the assessor of each town to report with his annual assessment roll, the amount of crop raised the year before, and the number of acres sown or planted the year the assessment is made out. This if reported promptly will afford a reasonable estimate of the produce of the State, and we have no hesitation in stating that the results will make our agriculturists open their eyes to the light returns they get for their investments, and we think such a law will be a great benefit. It is carried out to a much further extent in Ohio, as all the livestock is included in their spring returns.

A bill has been reported on favorably to prohibit the making of sleighs and wagons in the State Prison at Jackson.

A bill to provide for the draining and reclamation of lands by making a system of State roads, is reported.

The bill to provide for the trial of officers upon information, and without indictment by Grand Jury has been passed in the lower house.

The several bills referring to the militia of the State are in a state of forwardness in the lower house.

The contested seat in the Senate has been finally disposed of by Mr. Tyler withdrawing his memorial, and thus Mr. Pond is left to attend to his duties as a legislator. The case is one which shows how carefully each elector should examine his tickets, and also how particular committees and candidates should be to make known the correct names at an early day.

The formation of a new county to be named Muskegon, from a part of Ottawa, is under consideration.

The bill for the relief of the people of Isabella and Gratiot counties was negative in the lower house last Saturday, but has since passed.

The Legislature has passed a law authorizing the appointment of a deputy superintendent of common schools, and fixing the salary at \$600 per year. The business connected with the education department has increased to such an extent, that the superintendent was unable to perform all the duties of his office, and the salary paid him did not allow him the means requisite to hire an assistant.

Scientific Intelligence.

Agricultural Patents issued for the Week ending January 11, 1859.—Daniel Bruce, of Pasphebec, Canada. An artificial manure. By his process animal matters are first decomposed and then disinfected by the use of charged shale or its equivalent.

John L. Knott, of Glassboro, N. J., an improvement in Stump extractors.

Isaac Reamer of Conrad's Store, Virginia, an improvement in corn shellers.

Thomas Wendall, New Albany, Ind. A mode of conveying and securing the gears of mowing machines.

Mr. Woodward, the inventor of the planing machine that bears his name, is now in Washington, for the purpose of procuring a renewal of his patent.

There are no less than two projects now before the public for crossing the Atlantic in the air. One is got up by John La Mountain, whose plan is by a silk balloon for the construction of which he has made arrangements in Boston. This balloon is to be capable of carrying four persons, with their provisions and baggage. This balloon is first to be tested by trials from some of the western cities, in long journeys more daring, and is by Professor Siekler, who has already made some experiments as an aeronaut. The following description taken from the Xenia News, will give some idea of the plan of operations.

The bottom is to be of thin sheet copper, weighing not more than half a pound to the square foot. It is to be cigar-shaped, very much like the Winans steamer, 300 feet long and 80 feet in diameter at the center, tapering towards each extremity. Beneath this balloon is to be suspended by wire cables a platform of the same conical shape and to be placed the machinery of the air-ship and the cabin for passengers. The surface measure of the balloon will be 151,425 square feet, and its total weight will be 37½ tons. It will contain 2,894,400 cubic feet of gas, which will support in the air a weight of 56½ tons. The platform, cabin, machinery, &c., are estimated at 18 tons, leaving still power enough to elevate 21 tons of passengers, freight and ballast.

It is proposed to propel this vessel by means of large paddles or fans, to work in the air as the paddles of a steamboat work on the water. There is to be one wheel on each side of the vessel, and at the stern is to be a screw propeller, all of these to be worked by steam engines placed at the center of the platform. The paddle wheels as they enter the wheel-house above, and to unfold again as they strike the air in the desired direction.—There are to be three small oscillating engines, of five horse power, one for each wheel.

To confine the balloon to a given height above the water, it must be evenly ballasted, and attached to a copper float in the water, connected to the platform underneath the air-ship by coil of wire rope. An ingenious contrivance, which cannot be satisfactorily explained on paper, is attached to the platform, whereby the balloon is as certainly steered as a vessel in the water.

Prof. S. thinks he has effectually overcome the two great difficulties encountered by all experimenters in aerial navigation viz: the expansion and contraction of gas, and the difficulty in exhausting the common air of the balloon with rigid sides, without having it crushed. The means used to obviate these difficulties we have

not the space to explain; but, suffice it to say, the process seems wholly practicable and effective.

It is calculated that, with head winds, a speed of forty miles an hour can be obtained with this air-ship, and with favorable gales the speed would be increased to one hundred. Prof. S. estimates the cost of building such a balloon at \$40,000.

Dr. Beck, of Danzle, has just made a curious discovery. He has found an antidote, or rather a counterpoise, for ardent spirits. It is a mineral paste, which he encloses in an olive, and which, once absorbed, destroys not only the rising effect, but likewise the disastrous consequences of drunkenness. He tried several experiments on a Pole, an irreclaimable drunkard. The individual, named Beck, swallowed three bottles of brandy in succession, and after each bottle ate an olive prepared by the Doctor. He experienced neither the effect of drunkenness nor the slightest sickness.

General News.

There appears to be a considerable attempt made by correspondents to get up the impression that there are extensive gold diggings in the new territories. The effect of such reports in creating a large amount of emigration is unquestionable, but the profits to those who engage in it are very much like the profits of a lottery. Arizona, Kansas and Nebraska have each their diggings, of which specimens are sent as baits to tempt the unwary.

A revolutionary movement in Hayti is in full blast, and possession of the city of Gonaives, and of a part of the country around it is held by the insurgents.

A bill has been introduced into the N. Y. Legislature, which provides that children shall not be allowed to attend theatres unless they are accompanied by their parents or guardians. This is a move in the right direction.

The American Tract Society held its annual meeting at New Haven, Conn. on Saturday the 15th inst. By the proceedings which have been reported, we note that the receipts have been increased \$15,000 during the past year.

The Michigan State Medical Society met at Lansing last week. The officers elected for the year were Dr. H. B. Shank, Lansing, President; Dr. M. Gunn of Detroit, Vice President; Dr. E. P. Christian, Wyandotte, Secretary; Dr. J. H. Beach, Coldwater, Treasurer.

A telegraph line has been completed within the last week to Leavenworth in Kansas Territory. The first message direct from New York was sent to the Herald on Tuesday the 25th inst.

The steamship Europa brought news from Liverpool to the 8th inst., which seems to give a gloomy impression that Italy was in a very troubled state, and was likely to give Austria some trouble. Austria, however, had already nearly 100,000 soldiers placed in her possession by way of preparation. Sardinia, however, seems to be preparing for a fight, and she will unquestionably form the nucleus around which the revolutionary forces will gather, the war, if once begun will be of the sternest kind, and this time Austria cannot count on any assistance from Russia. Matters will be the other way. But it will unquestionably be found that the Pope and the priesthood will side with Austria, as that government is their mainstay.

The news from Spain does not give the least hope that any overtures for the purchase of Cuba will be regarded with the least favor. O'Donnell, the most influential man in the Cortez, having declared that the government was inclined to regard the proposition as an insult.

The Emperor Alexander of Russia is reported as about to pay a visit to Queen Victoria during the coming summer.

At Cracow, there has been a movement among the Poles, who it is said propose to transfer that fortress from Austria to Russia.

The army of France is being filled up, and put on the most available footing. Italian affairs look really troublesome, and it looks as though a great struggle was about to begin for the possession of Italy. We do not yet think that Louis Napoleon has given up the idea of continuing in the person of his son the title of King of Rome, and this he cannot do unless he has wrested from Austrian possession the territories of Northern Italy which she now holds. As for the Italians and their hopes of independence, that is an old story! and Italy has been such a foot ball for kings and emperors since the time of Charlemagne, that for them it will be out of the frying pan into the fire, when Austria is thrown off, and France gets into the saddle.

Johnathan Wales of South Franklin Mass., a young man of respectable connections, apparently of fair business habits, and twenty-eight years of age, deliberately shot Miss Susan V. Whiting, a young lady about eighteen years old, to whom he had been engaged, but who had broken off the engagement. He then shot himself. The people of the town where the parties are known, admit it to be a case where love overmastered reason.

The citizens of Paw Paw are organizing a movement in favor of the revival of the Temperance Society of that place.

The Spiritual movements are having an exciting time in Boston. One set of mediums are engaged in exposing the tricks of the others. All the demonstrations take place in public, and large audiences are drawn together. A night or two ago, in Tremont Temple, one Bly, a medium, allowed himself to be tried, by a committee, having made a bet with Dr. Gardner that he would perform the feats of the famous Davenport boys. The first says: "The whole resulted in a triumph of Bly, he releasing himself while in the box from the cords, which a competent committee, consisting of skeptics and spiritualists, had bound him and an associate in as tight and intricate a manner as powerful muscles could perform or remarkable ingenuity devise. Ten minutes after the door of the box was closed, one of the inmates was heard playing upon the guitar. Five minutes more elapsed, and the drum and other instruments were heard. In half an hour one of the twin ropes from the box, enveloped in a sheet, and untied the ropes on the outside which bound the other. He again entered the box, and in twenty-five minutes more both came out on the platform. Mr. Bly said he had successfully exposed the humbug, and offered to wager \$100 that he would again perform the feats of the boys in a more satisfactory manner than they could themselves perform them, and he would give their friends a week to produce them.

A wealthy gentleman offers \$50,000 to the Harvard University, as a means of providing a suitable museum for the collections of Agassiz in Natural History.

Sax, the inventor of the musical instrument known as the Sax-horn, is suffering severely from cancer. A plant brought from the Spice Islands by a Dr. Vries, of Paris, has been applied to the disease, and has arrested it.

William Bradford, the oldest printer in New Jersey, died within the last week. He had frequently seen General Washington.

The Rev. Theodore Parker is suffering from sickness, and has been granted leave of absence for a year by his congregation that he may have the benefit of a warmer climate.

The wicked and unnatural separation of the boy Mortara from his parents by the Romish priesthood is likely to cause the death of the mother.

P. M. D. Collins, the gentlemen who visited the Ancon territory, has returned from a trip, which was undertaken with the design of calling the attention of the Russian government to the necessity of opening up the country by railroad enterprises. He has been favorably received by the Russian Emperor.

Lola Montez is lecturing in Ireland, and is a warm friend of the establishment of more intimate postal arrangements between this country and that.

Lieutenant General Scott had a public reception on his arrival at New Orleans on the 4th, and at the same time had his overcoat stolen.

General Garibaldi, the celebrated Italian revolutionist, is still living and is much respected.

The will of the late Henry L. Ellsworth is to be contested by the heirs, on the ground that Mr. Ellsworth was of unsound mind when it was executed. A strong array of legal talent has been retained.

The Commissioner of the General Land Office has decided that in all cases where lands belong to the United States have been regularly surveyed and sold—the proprietorship of the Government therein entirely ceasing—it is not incumbent on the Government to cause a re-survey to be made, even if the lines, corners, &c., making the original survey shall become obliterated. The re-survey must be made by the owners of the land, on the basis of the field-notes of the original survey; or the State may order such survey to be made. The General Government, however, having nothing further to do with the land.

The Shoe and Leather dealers of Boston are about to establish an Exchange of their own on the same principle as the Flour and Grain Dealers Exchange.

The museum of the Veterinary College in Philadelphia, was opened Jan. 17. It contains one thousand specimens, including an entire skeleton of a horse.

Ex-President Pierce has taken up his residence at the island of Capri, near Naples. The health of Mrs. Pierce requiring the benefit of that mild climate.

A South Carolina paper asserts that the result of the landing of the Africans from the Wanderer, will be the passage of a more stringent law at the next session of the legislature to prevent the importation of savages from the coast of Africa.

The correspondent of the Philadelphia Press writing from Savannah, Georgia, thus speaks of the affair of the Wanderer:

This first attempt to import Africans into Georgia is a feat of a few daring, reckless individuals. As it is the first, so will it be the last attempt. Though apparently successful, as a remunerative speculation it has failed.—The sense of our city, and of our whole State, condemn it. Many of the miserable victims have died since landing, from pneumonia and pleurisy. The costs of prosecution will be heavy to those concerned; the loss of the vessel, which will undoubtedly be condemned, and the many who are to share the proceeds of the sales, will absorb all the profits, and perhaps more besides. The attempt will not be repeated. Much credit is due to the officers of the Government for the vigorous manner in which they have prosecuted this case. Joseph Ganahl, the United States District Attorney, is assisted by the distinguished and accomplished Henry R. Jackson. It is their determination that none, either nearly or remotely connected with it, shall escape. At first the prosecution was treated lightly by those arraigned; it was thought to be a mere form of law, if not a mere farce.—But the vigor and earnestness of the officers, who are backed by the full power of the Government, have put a different complexion on the case.

Political Intelligence.

The Hon. William Sanlisbury, of Sussex, has been chosen U. S. Senator by the Legislature of Delaware.

Henry Wilson, has been re-elected to the U. S. Senate by the Legislature of Massachusetts, and Wm. Pitt Fessenden has been re-elected Senator by the Legislature of Maine.

A despatch from Kansas states that Montgomery, the chief of the party accused of disturbing the peace, has voluntarily yielded himself to the authorities to await his trial on the charges made against him. Brown the other leader has disappeared, and is supposed to have left the territory.

A dispute is reported to have taken place in the executive session at Washington, between Senators Douglas of Illinois, and Fitch of Indiana. The reporters have already proclaimed their fears of a duel—more humbug.

John J. Crittenden, of Kentucky, and Wm. A. Shaw of Mississippi, are already nominated for President and Vice President by a Mississippi newspaper.

There are a number of rumors afloat that several changes are to be made in the principal offices of the General Government held in this State. Amongst them the Postmaster is mentioned. We can only say that the office has never been so well administered, as it has been since the appointment of Mr. O'Flynn. The utmost promptness and attention to the public interest has been manifested in all the arrangements and improvements made by him, and his corps of clerks.

Mr. Sherman of Ohio, has made a statement in the House of Representatives, based on documents and affidavits placed in his hands by D. B. Allen of New York, which charges that some of the officers at the Brooklyn Navy Yard, had made it a common practice to sell offices and employment to the workmen engaged there. The House have appointed a special committee to examine into the matter.

The difficulties that have been reported as existing between Senators Douglas and Fitch, is at last settled.—Cards are to be published in one of the Washington papers to that effect.

It is reported that the Spanish Minister, will demand his passports if the bill giving thirty millions to the President to purchase Cuba should be granted.

Some discussion appears to have arisen in the U. S. Senate as to the method by which newspaper reporters gain information of the proceedings when in secret session.

A provision of \$7,500 for a diplomatic agent to reside in Japan, has been put in the usual bill of appropriation for that service.

The re-election of Mr. Benjamin from Louisiana is considered doubtful.

The foot ball in the House of Representatives for the past week has been the Naval Appropriation Bill, which it has been contended should go to the Naval Committee instead of being referred to the Committee on Ways and Means. On this question there have been warm debates, on the necessity of economy; but as yet we see no result.

Mr. Mason of Virginia has also introduced a bill authorizing the President to use the land and naval forces, whenever he may deem them necessary, by reason of the distracted condition of Mexico or the Central American States. Many look on this proposition as clothing the President with all the powers of declaring war, against those States.

The Pacific Railroad still occupies the attention of the Senate at Washington, and affords occasion for making all kinds of speeches. The Georgia Senator, Mr. Iverson made a severe attack on Mr. Houston to which Mr. Houston has replied. On this question there have been warm debates, on the necessity of economy; but as yet we see no result.

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The Household.

"She looketh well to the ways of her household, and catcheth not the bread of idleness."—PROVERBS.

EDITED BY MRS. L. B. ADAMS.

LIFE.

Life is most glorious! To live!
To feel warm life the pulses thrill!
To feel the potent power of mind.
The eager heart, the soul to bind
All nature with its ardent will:—
The animated, living sense
Of Being;—knowing, feeling all;
To nerve the heart with strong resolve
To meet whatever shall befall;
To struggle, willful not to fall;—
To conquer danger, harbor joy,
Subdue all evil, and to plan
For any fate, at any hour,
And feel within oneself the power,
Makes life a triumph unto man.
But then there is another view,
Of weariness, and weighty care;
And illnesses of soul, and grief,
And fortunes, seeming past belief
That man, with all his strength, could dare.
And most portentous, gathering clouds,
That loom the horizon afar,
From which the spirit, over-tried,
Will shrink, and fear their ill to bide,
Before it knows how dark they are.
Yet skies are glorious after storms,
Though dark and dreary while they last;
The sunshine fair, all nature gay
As 'tis when storms are passed away,
Makes joy that they have come, and past.
Who would not brave a day of grief?
'Tis but a day at best or worst!
To-morrow's draught will be more dear
After to-day, whose cup while here,
We drink of, thinking 'tis accursed.
'Tis one of life's most crowning joys
To gain a hard earned victory;
To struggle and disarm a foe,
The consciousness of strength to know
Which, without trial, cannot be.
And in this strength exists the charm;—
Life is not lovely to the weak;
But those who dare all fortunes meet,
And from the bitter take the sweet,
Find it more grand than tongue can speak.
Yes, life is fair, and you, and I,
And every one, if so they will,
Can make it so exceeding dear
Eternity will but appear
The one existence happier still.

A. G. W.

Detroit, January, 1859.

WOMAN'S EDUCATION.

"Woman's humbug!" exclaims old Mr. Foggy, crossing his legs impatiently, and turning the paper to see what is on the other page. "Women have already got more education than they know how to make use of, and still they are crying for more, more! They are the most unsatisfied, discontented, unhappy set of creatures ever put into this world!"

"Just so, Mr. Foggy; you never made a truer remark than that. Think carefully over all within the circle of your acquaintance and count how many truly happy, contented women you can find; that is, contented with their lot in life, and as happy as it is reasonable to expect them to be, while subject to the trials and infirmities of our common humanity."

"That's exactly what I was saying. They are a fretful, discontented, unsatisfied set, the whole of 'em, from the Judge's wife down to Polly Scrubs, who gets her living by picking up paper rags in the streets. To speak plain about it, I believe Polly is the happiest of the whole lot. She hasn't an idea above rags, and troubles herself about nobody's education; but now there's Dan Ames' wife; look what a parcel of crows' feet have gathered about her eyes in the past six years, and she the wife of the richest merchant in town.—She came right out of one of the best schools of the State, where she might have stayed till she got education enough to satisfy her, if it hadn't been that her mother was afraid Dan would be picked up by somebody else, and so hurried on the match. Now she has found out that housekeeping is unsuited to her tastes, her husband's society is not 'congenial,' I believe that's the word she uses, and she has joined her clamor with the rest, 'Give us more education, and fit us for a nobler sphere of usefulness.' And that pale little Mrs. Penniman, who married for a home because her father had not means to keep her with his dozen other children at school, see what a life she makes of it! all the while dreaming of poetry, reading autobiographies of distressed and unappreciated authors, forgetting her husband's dinner, and letting the children go to school with soiled clothes and dirty faces! Then there is Tom Rhodes' wife, a plump, stout, healthy woman as need be, able to do all the housework of a two hundred acre farm, yet crazy to sell out and come to town, where she and all the young Rhoduses can have the benefit of high schools, lectures, intellectual society and so forth. Education! education! is their cry, when they have already got enough to destroy all the domestic happiness in the world. Why, there was poor George Thrasher told me that nothing else but the schooling she had, made such a tervagant of his wife. At

first she would have her books, and tried to carry on her studies and her work together, but she soon found that wouldn't go on easily, and after fretting and worrying over it for a year or two, she had to give up the books, and has been as cross as the mischief ever since. She will have the newspapers, though, and takes great delight in reading the doings of the strong-minded women. He expects she will soon get to such a pass that he won't dare to call his head his own; when, if she had been brought up as women should be, to know her place and mind the work that belongs to her, this restless spirit would never have got into her, to be the torment of her household. The smattering of education that women get now-a-days just turns their heads, and unfits them for the common business of life."

"Exactly so, Mr. Foggy; it is the smattering of education that does it, and not the education. Some women, endowed with the good, common sense philosophy of making the best of it, will take what education they can get, and pass through the world as a fortunate class who have, apparently, all their desires within their reach. But a far more numerous class are those who know just enough to create an unsatisfied hunger for more; they have thoughts that can be neither comprehended nor appreciated by those to whom they are bound; sometimes, perhaps, scarcely understood by themselves. They cherish a vague, dreamy idea that with other associations in other circumstances, they might have attained to some intellectual eminence, and been known to the world and to fame. They have little sympathy with, or interest in the ordinary business of workday life, consequently their duties are performed, not as pleasures, but as tasks, which soon become so distasteful as to be neglected, and then, to sum up all, you call them, as they are, unhappy wives, injudicious mothers and wretched housekeepers. Is not this the result of a lack of education, a want of the proper development of the intellectual powers before the great duties of life are entered upon, which, for a time, eclipse every mental aspiration, and in the end, effectually prevent the free and healthy growth of those mental faculties that might have been trained and strengthened into blessings; whereas, in their dwarfed and warped condition they prove rather curses than otherwise."

"Ah, now perhaps you are coming to the right point in the matter! Getting married too young is quite a different thing from not having education enough."

"The one is the result of the other. Girls are usually brought up with this one idea before their minds, that they are to get married. It may not be spelled out to them in so many words, but that is the manifest end and aim of what education they do get; and before they fully know what they are, or what they might be, they are pushed forward into society, become bewildered by its pleasures, fall in love, or think they do, get married, and fondly imagine for a time that they have accomplished the highest destiny of woman. But thought will have its waking hour, and, unhappily for most women, the waking comes too late. There is no going back, repentance is unavailing, they must wear the fetters their own hands have helped to clasp, and if they have not the moral courage and homely philosophy to 'make the best of it,' their lot is bad indeed. The cheated intellect will have its revenge, and then come the unsatisfied longings, the hopeless repinings, which change some women, who might have been the noblest of their sex, into termagants and tigresses, while others droop and sink away into listless dreamers and morbid, melancholy mopes. Give girls the same chance for life that boys have, and see if they will not meet it as bravely, as cheerfully and as rationally. What do you think would be the condition of men, both mentally and physically, a few generations hence, if all the boys were hurried through school and married off between the ages of sixteen and twenty. Would there be any broken down constitutions, feeble intellects, unsatisfied, discontented spirits among them, do you think?"

"Can't say—didn't comprehend what you were speaking of," says Mr. Foggy, scrutinizing the wool cuts on the first page.

A Familiar Letter—Husbands and Wives.

MR. EDITOR:—Your changes from monthly to weekly, and to pay in advance, deserve unqualified approval. You now have room for a greater variety of matter, and therefore I propose to give your readers an occasional article, upon any topic that may serve to entertain, and at the same time to instruct them.

My early life was spent on a farm, while many pleasant hours since that time have been passed by the farmer's fireside. There I have observed many things that were of interest to me; I hope the results of my observations may be useful to others.

Young married people usually assume,

each their portion of work to be done, without much thought or calculation. Habits are gradually formed, that if good, are invaluable,—if bad, they are hard to eradicate. In every family, there are well defined duties assigned to the husband; others as clearly belong to the wife. The husband does not make beds and sweep house, nor the wife follow the plow. But there is also a shading off from these plain duties, of each towards the other side,—a border ground, where education, or disposition, or other cause, assigns the work to either, without settling the question as to which it properly belongs. I propose, partially at least, to explore this border ground, and give the result of my observations.

Before taking up these topics, however, I wish to hold a little friendly talk with my friends,—young married farmers,—for the reason that the habits of men more advanced, if good, need no strengthening, and if bad, are usually incorrigible.

You, my young friend, have married the girl of your choice, and have engaged in your chosen occupation—a farm; the son of a farmer,—and your wife a farmer's daughter. Her mother has taught her the duties of a housekeeper, so that forthwith she enters upon them readily, and performs them judiciously. For a moment, however, let us suppose that you have married a girl, whose injudicious mother consented to degrade herself to the level of a family drudge, in order to enable her daughters to show white and soft hands, to live idly, and despise housework. Don't fret; you should have been wiser.—But even now, if your wife has a substratum of good common sense, and is willing to work and to learn, take things kindly,—encourage her onward,—do not be fault finding, and all in due time will come right. If, however, you have taken one "for better, for worse," who "hates housework,"—one who performs her duties as a task, to be shirked as much as possible,—I pity, but cannot help you. Still it is of no use to fret. Bear it as well as you can.

I have only glanced at a possible case. Yours is not of that number, and I congratulate you. Yet something you will do well to remember,—things that many strong, industrious, ambitious young men overlook—not so much by design, or want of affection, as from sheer ignorance or thoughtlessness. They forget that passage of holy writ, that is just as applicable to this life, as the next; that which is necessary to health and comfort, eye and profit too, in the long run: "Giving honor to the wife as the weaker vessel." This is the keynote to my subject. Your wife may possess a good constitution; or like many others, it may be rather delicate, without her being sickly. One thing is certain: she has not the strength of an elephant, nor a donkey's power of endurance. Many a man at the age of 30 or 35, finds, that with an increasing family, his wife is often fretful or low-spirited, and she drags herself about the house, and does things because they cannot be left undone, rather than for the reason that she has health and strength sufficient for her work. Certainly you do not wish to use your wife, as the sugar-planters do their negroes, *work her to death—wear her out*,—and then, with most exemplary resignation, look out for a step-mother for your children. No! you never thought such a thing possible. And let me tell you, *many a wife and mother has been literally worked to death*. Yet not by design. The husband meant no such thing. When she died, he, as well as his children, wept tears of genuine sorrow. Nor were they accompanied by remorse of conscience. In future numbers I may explain how it was done.

S. Y. E.

Household Varieties.

The Court Ladies at Washington.—The Washington correspondent of *The Springfield Republican*, writes:

When I think of Mr. Douglas's struggles, labors, anxieties, for the last few months, in order to secure his re-election, I conclude that he must have at least had a weary life of it. So much was stated, his fortune, his fame, his hope of the Presidency. The time had come when he must rise or set, brighten or go out in the political world. He sold his house at Washington, mortgaged his large property in Illinois, and during all the burning summer "electioneered" abroad, while his wife electioneered quite as successfully at home. On the Sabbath she worshipped devoutly in the Catholic church at Chicago, while during the week she gracefully propitiated the Protestants. At the Lake View House she exerted a marked personal influence over the gentlemen congregated there, who as usual were quite willing to be led by a young, beautiful and brilliant woman. Educated at Washington, long a "copyist" for the "House," she is thoroughly initiated into the chicane of political life, and knows how to touch with a sure and delicate hand its most intricate wires. That Mrs. Douglas will do her part toward making herself "lady of the White House, no one who knows her doubts. Give her all wifely honor. She has rescued Mr. Douglas from at least some of his low associations. He becomes drunk less often, and in social life is now admitted into society from which he was once excluded. That he is to-day the great man of the political world, he probably owes

to himself. But if only through the lowest sycophancy, the meanest subterfuge, through the pools of craft and falsehood, one is to wade to "greatness," let us all pray to be little.

Apocryphal of female politicians, Mrs. Douglas is not alone. Mrs. Conrad, a young, rich and lovely widow, "who (another has said) has too good sense to marry," is called the greatest courtier in Washington, and exerts no small influence over state affairs. Her full-length photograph, with those of all the other beauties of grandpapa Buchanan's court, to be seen in Brady's in Broadway. First stands Mrs. Douglas; her physique is splendid—not soft and pliant, but proud and queenly after the Roman model. Dark hair, eyes, classic features, brilliant complexion, with a commanding rather than winning expression. The picture does not do her justice. Her dress of black silk is not becoming, and is made in a fashion which robs somewhat the grace of her perfect form.—Next stands Mrs. Conrad, all grace, clad in black velvet with pearls. A wily, a subtle, a beautiful Greek, with far-searching eyes, peach-tinted cheek, and wavy, golden-brown hair. Beside her, stands Madame Le Vert of Mobile, long an habitue of Washington, who for her social genius is pre-eminently above all American women. Madame Le Vert, without being beautiful either in form or feature, has reigned as a "belle" since she was ten years old. She has travelled widely, has visited nearly all foreign courts, can carry on conversation in six different languages at one time, and be equally charming in all. Yet not in her talents, nor in her accomplishments, lies her fascination, but in the genial sweetness, naturalness, and perfect simplicity of her manners, which seem to give her possession of all hearts. Her clear, blue eye overflows with the exuberance of kindness, while around the serene mouth all gentle affections seem to have found dwelling. She wears a dress of brown silk with gorgeous bordered flounces, and a crimson rose in her hair. The sweetest compliment I ever heard of Madame Le Vert, was uttered to me by one of her personal friends: "She is like a flower out in nature." Next her is Harriet Lane of the "White House," Mr. Buchanan's niece. A blonde, cold and statuesque; pure and passionless as marble—one's very admiration gives them a chill. She stands in a verandah, the Capitol in sight. A spray of flowers in her hair falls low upon her bare and beautiful neck. She looks a model of repose; the very Miss Lane whom the papers assure us "receives with great dignity."—And then, Lady Gore Ouseley, the Yankee English woman, who has seen fit recently to dip her fingers into Nicaragua affairs; who rules not only her own dear "Sir William," but our lady-like old President. Well, she is coarse and homely enough; and, according to the notion of your "Own Correspondent," is dressed in horrid taste. She wears a string of jets around her head of the size of walnuts; another around her neck of equal rotundity. She does not seem to care for an ample skirt, has utterly discarded the "line of beauty" in its "fall," for it is "skimped," shorter behind than before, and the flounces curve up on the sides. But she has a falcon eye, and her whole bearing indicates, in even more than an ordinary degree, the woman's penchant power to "rule."

A Miss Isabella Hinkley of Albany, New York, has made her debut as a songstress, at Florence, Italy, and was well received by the fashionable and distinguished personages who reside in that city.

The government of Sweden have granted the privilege of voting to fifty women owning real estate, in that kingdom, and thirty-one doing business in their own names. We are not sure that this right gives any of these *electresses* the privilege of being chosen as a representative, but we do not see why it should not.

On Dis.—The Washington correspondent of the *N. Y. News* states that there is a rumor that Miss Lane, Mr. Buchanan's niece, is shortly to be married to Mr. Magraw, of Baltimore, brother of the State Treasurer of Pennsylvania.

Miss Hosmer, the sculptress, has returned to Rome, and lives with Charlotte Cushman, between whom and herself there exists a strong friendship.

A correspondent of the *Boston Courier* on a shopping expedition with a lady in Broadway makes some novel suggestions as to the possible uses of hoops:

"And now my companion silently ascended two flights of stairs; I silently followed; we entered a room from whose ceiling depended what seemed like huge bird-cages or gigantic fly-traps. With wonder threading my way through this strange exhibition my ear caught the word 'hoops' and in a moment the whole mystery was patent. I was in the presence of those cunning contrivances whose effects I had daily seen, but of whose actual entity I had never before had ocular demonstration. The attendant cooperess suggested to my companion that twelve hoops would be enough for her! I longed to ask many questions—whether the number of hoops bore any relation to the quality of the staves—whether a stout woman required more hoops than a slender sister—whether a passionate woman, as being likely to burst into a rage, would be safer with seventeen hoops than with ten—but I didn't dare. How the article, when purchased, was to be got home, I could not imagine; but my wonder was great when the cooperess afore said handed me a flat, thin parcel. 'Where is the—the—arrangement?' faltered I, not well knowing what to call the hoops, but making my meaning clear by pointing to one of the pendant fly-traps. 'This is it,' said she, benignly smiling, and thrusting into my nervous hands the parcel. I said nothing—indeed, there was nothing to be said; so I found myself again in Broadway, looking like a happy father with an invoice of battle-axes under his arm. Thus ended my shopping; when I do like again, I shall be younger than I am now."

No Old Maids in Japan.—No single women are allowed in Japan. Every man is allowed one legal wife, and as many second wives as his means will allow him to support. The second wives are selected by law from the poorer classes of society, whose relatives are unable to maintain them, and the children are all adopted by the legal wife, who is the only acknowledged mother. The old rule is therefore reversed in Japan, where, instead of a boy not knowing his own father, hundreds do not know their own mother.

THE RED RIVER VOYAGEUR.

Out and in the river is winding
The links of its long, red chain
Through belts of dusky pine-land
And gusty leagues of plain.

Only, at times, a smoke-wreath
With the drifting cloud-rack joins,
The smoke of the hunting lodges
Of the wild Assiniboins!

Dreadfully blows the north-wind
From the land of ice and snow;
The eyes that look are weary,
And heavy the hands that row.

And, with one foot on the water,
And one upon the shore,
The Angel of Shadow gives warning
That day shall be no more.

Is it the clang of wild-geese?
Is it the Indian's yell,
That lends to the voice of the north-wind
The tones of a far-off bell?

The voyageur smiles as he listens
To the sound that grows apace;
Well he knows the vesper ringing
Of the bells of St. Boniface.

The bells of the Roman Mission,
That call from their turrets twain
To the boatman on the river,
To the hunter on the plain!

Even so in our mortal journey
The bitter north-winds blow,
And thus upon life's Red River
Our hearts, as oarsmen, row.

And, when the Angel of Shadow
Rests his feet on wave and shore,
And our eyes grow dim with watching
And our hearts faint at the oar,

Happy is he who heareth
The signal of his release
In the bells of the Holy City,
The chimes of eternal peace!

J. G. W.

REFORMING THE WOLVERINES.

CHAPTER V.

It soon came to be pretty well understood about the settlement that Mrs. Mystie instead of refusing to see her neighbors, as the Doctor had more than hinted, was anxious to visit and be on friendly terms with them, but was prevented by her husband's unwillingness to accompany her, and her fear of being lost in the woods if she should attempt it alone. Some time, however, she found it convenient made her a second or even a third call before their first was returned; and indeed, only two of them all were ever returned, for during the five months she lived in that little hut she was never away from home but twice.

It was on a bright March morning that Mr. and Mrs. A. made their second visit at the Doctor's. They hoped to find Sophia alone, but as they were going up the ascent before the door, they saw the Doctor come out with a pail of ashes and pour them on a large pile which almost blocked up the entrance; his wife followed with a broom, sweeping off the narrow board that separated the ash-heap from the door sill.

"He is there," said Mrs. A. drawing back, "he is there, and we shall hear of nothing but paupers and reform. Do let us wait till another day, we may find her alone."

"No, leave him to me," said Mr. A., "let me manage him; we will see if any one else has a right to speak but himself."

The Doctor looked very sullen when his guests entered, and for nearly a half an hour the civility of entertaining them was left entirely to his wife. The conversation went on cheerfully awhile, but at length music was mentioned, and Sophia was asked to sing and play on her accordeon. While taking the instrument from the box she chanced to speak of her piano.

"I miss it very much," she said; "I should feel quite happy if I had it standing in that little corner at the foot of the bed; it would be so much company for us."

"For my part," interrupted her husband, "I'd rather hear the music of nature than all the pianos in New York. You Broadway folks can't be satisfied with nature, you must have your finery, your pianos and your novels, you can't be satisfied to live as nature made man to live. Here we have the great book of the universe spread out before us, we have birds for music, and every thing around to make us happy, while in the city of New York alone there are more than fifteen thousand paupers, persons who in the morning don't know where they shall lay their heads at night. How many of them would be glad of as good a home as this."

"Yes, it is true," said Sophia, thoughtfully, as with the accordeon on her hand she sat prepared to sing.

"Here," continued the Doctor, placing himself directly before Mr. A. and drawing a late number of his new reform paper from his pocket, "here is a 'Treatise on the causes of pauperism, containing suggestions for its prevention in the future cities to be founded by the Brotherhood of Universal Reformers.' Now sir, this is a scientific article. It begins at the beginning. It proves that ignorance of the first principles of Phrenology is the cause of all the pauperism and wretchedness in the world; and I believe it, Sir; I believe it; it's laid down so plain that you can't dispute it, that if a child's head is shaped in a certain way when he is small, he will just as certainly turn out to be a poor miserable pau-

per, as another child, whose head is shaped another way, will turn out to be a wise and rich man. Phrenology, Sir, will be found at the bottom of all our Sciences yet. You'll get a pretty good idea of it from this article. Hear what it says—

Mrs. A. glanced imploringly at her husband, who immediately interrupted the Doctor by saying, "I beg your pardon, but really Doctor, an article on that subject ought to be studied to be understood. It is one that requires deep thought. If you will be kind enough to lend me the paper I will take it home and study it as I get leisure; I shall understand it better and have more time to meditate upon it."

"Well—hem—I thought I could read it to you in an hour or two; there are but four columns and a half; it's very interesting," said the Doctor, hardly willing to give it up.

"For that reason it requires more time," persisted Mr. A. "I must have time to study and reflect in order to comprehend a subject of so much importance."

The Doctor very reluctantly handed his paper to Mr. A. who gravely folded it up and placed it in his inside coat pocket. Standing with his back to the door and his hands crossed behind him, the Doctor looked as if he had been deserted by his last hope. Sophia improved the moment and began to sing "On old Long Island's sea girt shore;" but before the first strain was ended her husband exclaimed;

"The music of nature is beyond anything that man ever invented yet, give me nature as she is, I want none of your artificial sentiments and cified notions. Why can't we be satisfied with nature? it's greater than the city, greater than anything that man can make."

"Did you bring any piano music with you?" asked Mr. A. of Mrs. Mystie, without attending to the Doctor's remarks.

"O, yes; a great deal more than I shall ever have occasion to use here," said she, opening at the same time a large trunk half filled with sheets of music, and raising these she took from beneath them two splendidly bound and illustrated music books. All except the Doctor were soon engaged in admiring the pictures, the songs and the music; the reformer could endure it no longer, so drawing his cap down to his eyes he made a sudden exit from the hut and went off among the knobs to meditate on the beauties of nature.

But a merry little company was that he left behind. Without remarking on his absence they felt relieved, they chatted and laughed, and Sophia sang, and even the yellow cat came in for her share of the enjoyment. She sat on her mistress' lap without fear of being thrown over the house or into the brush by her dreaded master; her virtues were enumerated and praised, and her fault, she had but one, that of playing with the Doctor's suspenders when he was dressing himself, was commented upon though very leniently when it was known how many kicks she had endured without reforming, for then it was considered as a fault of her nature for which she was not responsible.

Thus an hour passed pleasantly away, and just as the visitors were about leaving, the Doctor returned. He detained them only long enough to entreat Mr. A. to be very careful of his newspaper as he wished to preserve that particular copy on account of the treatise explaining the origin of pauperism. It may as well be observed here, that the paper was kept a week or two without ever being unfolded, and when Mr. A. returned it to its owner he assured him that if the principles it advocated should prevail they would undoubtedly succeed.

After this, Sophia spent one afternoon at Mr. A.'s; the only other visit she made was at the house of a worthy old Englishman who lived some three or four miles away. It was a stolen visit and one that her husband would never have permitted had he been consulted. This Englishman, whose name was Samuel Dale, better known among his neighbors by the familiar title of Uncle Sam, was a shrewd but benevolent, kind-hearted man, who had been acquainted with the Doctor before his marriage, and against whom that worthy individual cherished a secret and lasting grudge, the origin of which was this. When in his bachelor days he had decided on making the important change in his condition, and had, as related in the first chapter, met with one disappointment, he applied to Uncle Sam for advice and requested his assistance in choosing a wife. Uncle Sam who loved a joke, first made him promise that he would marry the woman he should designate; the poor Doctor was willing to promise almost anything so that his new coat and the extra cup and saucer he had bought for his first love might not be entirely lost. Uncle Sam manifested much fatherly anxiety for the Doctor's future welfare and spoke long of the qualifications a woman should possess to make him happy; he then informed him of the name and place of residence of a lady of his acquaintance whom he believed was endowed with the requisite virtues, and sent him on his

errand of love. When the Doctor arrived at the house and enquired for the lady, he was shown an antiquated dame in spectacles, who, with her pipe and knitting, sat quietly in a corner rocking with her foot a cradle which contained the youngest of her numerous grand children. He was disappointed, mortified and very angry, for he had expressly told Uncle Sam that he wanted a young wife. It was an insult he never would forgive: he did not consider his promise binding, and after one more interview with Mr. Dale, on which occasion he gave him a piece of his mind pretty plainly, he resolved to hold no further communication with him, as the quizzical smile on the old gentleman's face was anything but agreeable.

It so happened that after the Doctor's marriage Uncle Sam had frequent occasion to pass by his house. Once or twice he called in and had a sociable chat with Sophia, then he took his wife to see her. Much did he wonder, as did every body else, how she came to marry the disagreeable creature and allow herself to be brought to such a place as that. He urged her to visit his wife, but she told him she had no means of riding, she was not accustomed to walking, and more than all, her husband would be displeased if she went without his permission.

But Uncle Sam was not to be baffled; he thought from Sophia's free-hearted way of speaking that if he could once get her to his own house, talking freely with his good wife and his still more sociable self, the whole mystery of her marriage would be made clear. He went home resolved at no distant day to make her his guest.

Sophia mentioned this invitation to her husband, who had been absent when Uncle Sam was there. He forbade her to think of visiting that family, and when she replied that she had quite fallen in love with good motherly Mrs. Dale, and that she wanted just such a friend after having lived alone so long, he told her he would not hear of it; she might find friends enough in the papers he provided for her to read, she might cultivate her mind and leave gossiping to others.

"Our neighbors have been very kind, and they will think strangely of me if I do not visit them at all," said Sophia.

"What if they do?" returned her husband in a petulant voice. "It's no matter to us what they think. They're not the kind of people I want you to associate with; all they know is dig, dig, dig, work, work, work, from one year's end to another."

"It would be better for us if you knew, or at least practised more of that yourself," said Sophia; "Mr. Dale wondered why we had no cow or pig or chickens, not even a dog about us."

"I don't live for such things," he interrupted; "I've other things to think of."

Monday of each week was the day on which the Doctor usually went to the post office, a distance of six or seven miles, and he seldom returned before night. The Monday after the above conversation he set off at a very early hour, leaving Sophia with strict injunctions to stay at home, as all their neighbors, he said, had proved themselves his enemies and would watch every opportunity to rob the house if they found it alone.

Without any fear of being attacked by robbers, though the place was wild and lonely, away from any traveled road or human habitation, Sophia sat down by the window to watch the birds. This was her favorite and almost her sole employment whenever her husband was absent, though as yet all her efforts to catch them had been unavailing. But they had grown quite familiar with the appearance of the cage, they ventured to light on the stump, and one even rested his feet for a moment on the bars of the cage itself. He flew off, then came quickly back, fluttered and chirped and finally settling himself on the upper bar put his little head under the lid and looked wishfully at the crumbs on the bottom. Sophia's hand trembled—she drew the string—the standard and the lid fell; she ran to secure her captive, but he was gone! While she stood regretting her haste she heard the rattle of wheels, and presently who should drive up to the door but Uncle Sam himself in his own little wagon drawn by a stout farm horse.

"Now mistress," said he, speaking with a broad English accent, "I've come to take you to see my 'ooman this fine mornin'. You've been alone all winter mostly, and it's too bad, too bad entirely; aye, that it is."

Sophia though delighted with the prospect of a ride and a visit, had some fears about leaving the house, but these were all overruled, there was a strong lock and key to the door by which it was securely fastened, and very soon Sophia was seated in the little wagon by the side of Uncle Sam.

"What if he should come home first?" said she, with a feeling of apprehension.

"Never fear, mistress, never fear; it's quite early yet you see. You shall have some dinner with us and stop a bit, and then come home afore night. He'll never know if you don't choose to tell; and if he should what harm is it? He leaves you alone a great deal,

I'm sure he shouldn't complain of you for going once."

Sophia felt the truth of what he said, so throwing off all uneasiness she gave herself up to the enjoyment of the ride. Many a pleasant story had Uncle Sam to tell, beguiling the time as they wound slowly among the knobs, many a reminiscence of life in old England was brought up in sad contrast with the happier, more independent though still laborious life in the West. When at last they gained the level ground the horse was put to a brisk trot which in a short time brought them to the house.

Mrs. Dale received Sophia very kindly. She led her to a chair, took off her bonnet, untied her cloak, talking all the while and saying how glad she was her husband went and fetched her. It was a log house, but everything within and around looked so tidy and comfortable, Mr. Dale was so cheerful, his wife so kind, the room so light and pleasant that Sophia felt quite happy at having escaped for a day from her own dark, smoky little prison.

Mrs. Dale was a brisk little body, continually trotting about to see that everything was in order, though nothing ever seemed to get out of order in her house. She wore a dark cotton dress with a very narrow skirt, and a very wide, snow-white apron. Her hair was quite grey and cut square across her forehead, her cap was as white as her apron, and the broad frill, quilled with quaker-like precision, lay caressingly against her cheeks, covering many a wrinkle made by time and toil and early hardships. But whatever ravages time and trouble might have made with the other features of her face, it was plain that her eyes had escaped their blighting touch. She was now in her fifty-ninth year, but many a maiden in her teens might have been proud of such a pair of soft, mild, lustrous black eyes. Her voice was somewhat broken by the loss of teeth, but she always spoke low, and there was a coaxing, winning, petting way with her which completely won Sophia, and led her on little by little till she told her whole story.

Mrs. Dale was working over a churning of fresh butter, and she showed Sophia a pretty stamp, representing a branch of roses, with which all the rolls were marked before sending them to market. Everybody knew her stamp, she said, she was very proud of it, having brought it all the way from England where she had often refused to part with it, though dairy-women envying her its possession had tempted her with money.

"It is beautiful," said Sophia, "what perfect buds and roses! but the butter itself looks far the most tempting to me. I don't see such beautiful rolls every day."

"Don't you? yes, my 'usband he was telling me you had no cow; and do you buy your butter at market? it's a long way for you to fetch it."

"We do not have any at all," said Sophia, "and excepting once at Mr. A.'s, this is the first I have seen in nearly five months."

"O, dear! and is it possible? it's too bad to be kept so, you poor 'ooman. Now if you lived a little nearer us, as I often tell my 'usband, I might send you a bit ivery week; I could spare it as well as not, you see." So saying Mrs. Dale placed the rolls neatly between two white cloths in a basket which she afterwards carried down cellar that the butter might keep cool and fresh till morning, when her husband would take it to market. She then went to an oven in the corner where some loaves of light white bread were baking. While she was taking them out she asked Sophia whether she used yeast or salt rising in making bread.

"I use neither," said Sophia. "I cannot get yeast and I do not know how to make salt rising, so I have not had a loaf of light bread in the house this winter."

"Haint you, indeed? poor 'ooman; and no milk for biscuit either?"

"No; I make little cakes of flour and water mixed with Indian meal; it does very well, though I often get tired of it and wish for light bread."

"Yes, so you do, I expect; my 'usband he always gets yeast for me at the brewery."

Mrs. Dale's conversation always ran upon whatever chanced to occupy her hands at the moment, so when she came to prepare the vegetables for dinner she talked of vegetables, and Sophia, who seemed rather willing than otherwise to impart all the information she saw the good woman desired as to the state of her own culinary supplies, told her that potatoes were the only vegetables she had had since she came there, except once that the Doctor brought home four onions and allowed her to cook one every other morning till they were gone, "then," said she, "we lived on pork and potatoes again. We have neither tea or sugar,—yes he did bring home a pound of sugar once, but I did not know it till it had been locked up in his trunk more than a week. I never lived so before; I have borne it as patiently as I could, but there is no need of it, we might as well live comfortably as otherwise."

"Thru, mistress; thru, but we must

work for it," said Mr. Dale who came in while Sophia was speaking.

"Yes, we work for what we have," added Mrs. Dale who was laying the cloth for dinner.

"And I am willing to work," said Sophia, "if I had work to do. I spoke about making garden yesterday and I told the Doctor I would help him carry rails or burn brush or anything else he could ask of me; I never did such things or saw them done, but I think I could if it was necessary. But he declares that if we attempt to make a garden the neighbors will come nights and destroy it all."

"Not a bit of it, mistress, not a bit of it," exclaimed Uncle Sam, indignantly. "If they don't like the man over well, haven't they all enough to do to 'tend their own farms and gardens? And have ye seen one sens ye comed here that ye think would do the like of that to any man?"

Sophia acknowledged that she had not, but that on the contrary she believed they would all sooner spend a day in helping them make improvements than they would an hour in destroying them after they were made.

"Aye, aye; so they would, so they would, for your sake, mistress," said Uncle Sam. "They didn't care so much for him when he lived alone, he could do as he pleased, you see, but iverybody knows a 'ooman must be took care of. There isn't a man but would help him now if he'd go to work. You see how it is; we all work hard and we don't want to pick fault with them as doesn't, not while they lives to themselves, but when they get a 'ooman to suffer, why, then mistress, you see neighbors will know how things goes on, and they will talk about it."

"It is well enough that they should," said Sophia, "for no man has a right to treat a woman as I have been treated since I came here."

They now sat down to a plentiful dinner and after a short grace spoken in a reverent whisper, the conversation was resumed.

Sophia freely told the good couple that she had lost all respect for her husband, she had never loved him, of course. She was an orphan and having been left a widow also without any other means of support than her own talents, she had maintained herself by teaching music. There were times when that was unprofitable, and then she made her home with a married sister who had a large family of her own growing up around her. She felt herself an intruder there, she was without a home, and wanted one. Dr. Mystie was introduced to her as a gentleman from the West, where, it was said, he owned a farm partly under cultivation, with a good house and other conveniences upon it. She had always felt a romantic desire to visit the West, and now the prospect of securing a home thereby, induced her to accept at once the Doctor's proposal of marriage.

"Yes," continued Sophia, while her lips quivered slightly, "like a hungry fish I caught at the bait, and here I am. I speak plainly because I see you all know him better than I do. He is poor, but of that I should never complain if he would work, if he would try to make something to which we might give the name of home, I should be contented even in that desolate spot, and willing to do anything a woman's hands can do to help him. But he will not, he reads his papers all day and talks of his reforms all night. He starves me; he sees me weep without ever asking the cause, he lets me have no associations with any of my sex, he is unprincipled and heartless for all his professions. O, we have had strange times together through this long dark winter in that lonely hut! But my day will come yet!"

"Aye, that it will!" ejaculated Mr. Dale, scarcely conscious of what he said.

"It is only quite lately that I have had a hope at all," said Sophia, more calmly.

"Ah, and what is it, dear?" asked Mr. Dale hardly speaking above his breath.

"Some one has sent him a paper explaining the principles of the Water Cure system, and since he finds that he cannot fool Western people with his reforms he talks of going back to one of the New England States to practice on this new theory."

"Ah, mistress, leave him; don't go with him there," said Mr. Dale solemnly.

"He will pay my expenses as far as to where my friends live," replied Sophia, smiling. "I shall not object to that. There will be time enough for me to take care of myself afterwards. I have friends, and I can earn my living as I have done before."

"Aye, that you can, better than he does it for you, surely," said Uncle Sam with energy, and giving a very strong emphasis to the last syllable.

Sophia began to say something about hoping her husband would not hear of her intention of leaving him, but Mr. Dale interrupted her by saying earnestly.

"Don't think it, mistress; don't think it; no, never."

"No, don't think of us putting anything in your way, poor thing," echoed his wife.

When it was time for Sophia to go home,

Uncle Sam brought his horse and wagon to the door, while Mrs. Dale, taking from her pantry a basket covered with a white cloth, said laughingly,

"Now you shall have something good to lock up in your trunk;" lifting the cloth she discovered a loaf of bread and a roll of butter. Sophia felt as though she could not be sufficiently thankful, but she expressed her gratitude as well as she could. While she was getting into the wagon the old lady said,

"Now if you are ever sick, or want anything, just send here; poor 'ooman, how I pity you, if you should be sick away in that place alone; but just send for me, no matter if it is a great ways, or in the night, or anything, I'll come and stay and take care of you; now good-bye—the Lord bless you."

Mr. Dale drove off at a smart trot and was fortunate enough to get Sophia home before the Doctor returned. She did not inform him of this visit till some days afterwards, and then he was so much occupied with his new study that he paid very little attention to her, though she shrewdly suspected that the bread and butter which she generously shared with him had something to do with softening his displeasure.

Household Recipes.

Little Boy's Pudding.

One tea-cup of rice.
One tea cup of sugar.
One half tea cup of butter.
One quart of milk.
Nutmeg, cinnamon, and salt to the taste.
Put the butter in melted, and mix all in a pudding dish, and bake it two hours, stirring it frequently, until the rice is swollen.
This is good made without butter.

To Cook Celery.

Celery White Sauce.—Take two nice white heads of Celery, of medium size, and one small Onion; shred them rather small, and then stew them in a pint of water, with a tea-spoonful of salt, till they are quite tender. Mix an ounce of butter with some flour, to which add a quarter of a pint of cream; add these to the stewed Celery and Onion, and boil the whole up together, stirring it all the time. Flavor with a squeeze of lemon.

A plainer sauce than the above, and quite good enough for ordinary use, is made by cutting a large head of Celery fine, and boiling it till soft in a pint of water. Thicken it with butter and flour, and season it with salt, pepper, and mace.

Celery with Cream.—Select the finest and whitest part of a head of Celery, and after washing it perfectly clean, cut it into lengths of three inches. Boil it tender, and strain it. Then beat up the yolks of four eggs, and strain them into a half pint of cream, adding a little salt and nutmeg. Put the whole into a tossing pan, and set it over the stove till it boils to a proper consistency, and then send it to table with toasted bread under it.

Celery, Essence of.—This will be found very useful for flavouring soups, or broth, of any kind, and a few drops of it will communicate the Celery flavor to a pint of soup. Bruise half an ounce of Celery-seed, and put it in a bottle; then pour over it a quarter of a pint of brandy; and, after standing a fortnight well corked, strain the spirit from the seeds, and bottle it, when it will be fit for use.

Celery, to Fry.—Boil a head of Celery till it is tender, and then divide it into two. Season it with pepper and salt, and fry it with butter, or dripping, in the frying-pan.

Celery with Gravy.—Take what quantity you please of heads of Celery, cut them into short pieces, parboil, and drain them. Then put into a stewpan some fat, and a spoonful of flour, which brown. Add to this, gently, a ladleful of broth, a bunch of Parsley, some salt and pepper, and let it stew a quarter of an hour. Then put in the Celery and some gravy, and let the whole stand till the sauce is reduced, when serve.

Celery Soup.—Let the sticks of Celery be well washed, and then cut into lengths of about two inches. Put them into clear gravy soup, and stew them in a soup-pan by the side of the fire for an hour, till tender. If any scum rises, take it off.—Season with salt.

When Celery cannot be procured, a few drops of the essence, described above, may be used; or half a drachm of the seed, pounded fine, put in a quarter of an hour before the soup is done, and a little sugar, will give as much flavor to half a gallon of soup as seven ounces of Celery.—ROGER ASHPOLE, in Cottage Gardener.

For our Young Friends.

Miscellaneous Enigma.

I am composed of 7 letters.
My 2, 3, 5, 4, is part of a house.
My 1, 6, 7, is what farmers do.
My 4, 6, 7, is an adverb.
My 1, 3, 5, is a nickname.
My whole is a kind of a bird.
Niles. M. H. L.

Geographical Enigma.

I am composed of 19 letters.
My 15, 19, 4, 14, is a river in Russia.
My 11, 5, 12, is a cape of Massachusetts.
My 6, 2, 13, 4, 19, is an inlet, off the eastern coast of the southern States.
My 7, 9, 1, is a mountain in Massachusetts.
My 19, 13, 17, 2, 19, 11, 10, is a fortified city in Asia.
My 6, 8, 11, 19, 8, 9, 7, 16, 13, is a harbor on the coast of Florida. My whole is the names of two distinguished men who lived in the 16th century.
E.

Casco, Mich.

Answer to Anagrams in last number:—

Dissemination
Pedagogues
Parishoners
Presbyterian
Monarch
Victoria Regina in Old England.
Answer to Miscellaneous Enigma in last number.—ALEXANDER HAMILTON.
Answer to Geographical Enigma.—ADRIANOPLE.

